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No. 95-992

IN THE
Supreme Court of the United States
OCTOBER TERM, 1995

TURNER BROADCASTING SYSTEM, INC., *et al.*,
Appellants,
v.
FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Appellees.

Appeal from the United States District Court for the District of Columbia

JOINT APPENDIX
Volume I

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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Civil Action No. 92-2247
(and Consolidated Cases Civil Action
Nos. 92-2292, 92-2494, 92-2495, 92-2558)

TURNER BROADCASTING SYSTEM, INC., *et al.*,
Plaintiffs,

v.

FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Defendants.

DOCKET ENTRIES

Date	No.	PROCEEDINGS
7/28/94	322	CERTIFIED COPY of Judgment filed in Supreme Court of the U.S. dated 6/27/94, vacating judgment of USDC with costs and remanding case for further proceedings.
8/26/94	326	CERTIFIED COPY of Judgment filed in Supreme Court of U.S. dated 6/27/94, on appeal [309-1], vacating decision of USDC and remanding case for further proceedings.
9/12/94	329	ORDER by Judge Thomas P. Jackson, directing counsel by 9/19/94 to provide to the court a submission not to exceed 10 pages on certain issues.
9/19/94	332	MEMORANDUM (joint) by plaintiff(s) TIME WARNER ENTERT. in 1:92-cv-02494, plaintiff(s) NATL. CABLE TV in 1:92-cv-02495, plaintiff(s) THE LEARNING CHANNEL in 1:92-cv-02558, plaintiff(s) DISCOVERY COMMUNICATIONS in 1:92-cv-02558 on remand proceedings.

Date	No.	PROCEEDINGS
9/19/94	334	RESPONSE by movant CORP OF PUBLIC BROAD in 1:92-cv-02247, movant PUBLIC BROADCASTING in 1:92-cv-02247, movant PUBLIC BROADCASTING in 1:92-cv-02247 to the Court's order of 9/13/94.
9/19/94	337	RESPONSE by defendant USA and defendant FCC 1:92-cv-02247, 92-2494, 92-2495, 92-2558 1:92-cv-02247, 1:92-cv-02292, to the Court's order of 9/13/94.
9/19/94	338	MEMORANDUM by movant ASSOC. OF INDEP. TV. in 1:92-cv-02247, movant NATL. ASSN. BROAD. in 1:92-cv-02247 in response to Court's order of 9/13/94.
9/19/94	339	MEMORANDUM by plaintiff(s) TURNER BROADCASTING THE TRAVEL CHANNEL, QVC NETWORK, INC., NATL. CABLE SAT. CO, INTL. FAM. ENTERT., E! ENTERT. TELEV., BLACK ENTERT. TELEV. ARTS & ENTERT. NET., USA NETWORKS in response to Court's order of 9/13/94.
9/19/94	341	MOTION filed by plaintiff(s) DANIELS CABLEVISION in 1:92-cv-02292 for leave to withdraw as a party plaintiff.
9/21/94	—	STATUS HEARING before Judge Thomas P. Jackson: counsel agree that remand to be disposed of by Summary Judgment, counsel to submit agreed statement of facts.
9/27/94	—	RECORD returned from US Supreme Court, 93-44, four boxes of original records and exhibits.
9/29/94	348	MOTION filed by movant NATL INTERFAITH in 1:92-cv-02247 for leave to dismiss [#15] intervenor-complaint and withdraw as an intervenor-plaintiff.

Date	No.	PROCEEDINGS
10/6/94	350	TRANSCRIPT of status hearing before Judge Stephen F. Williams, Circuit Judge, Thomas Penfield Jackson and Stanley Sporkin, District Judges filed for date(s) of 9/21/94.
11/14/94	365	JOINT MOTION by defendant USA in 1:92-cv-02247, plaintiffs TURNER BROADCASTING, THE TRAVEL CHANNEL, QVC NETWORK, INC., NATL. CABLE SAT. CO, INTL. FAM. ENTERT., HEARST/ABC-VIA. ENT., BLACK ENTERT. TELEV., ARTS & ENTERT. NET. in 1:92-cv-02247, NATL. CABLE TV in 1:92-cv-02495, plaintiff THE LEARNING CHANNEL in 1:92-cv-02558, plaintiff DISCOVERY COMMUNICA in 1:92-cv-02558 for order of confidentiality; exhibits.
11/18/94	—	CASE REFERRED TO JAMES R. MILLER, JR. Esq., of MILLER, MILLER & CANBY, 200 B Monroe Street, Rockville, MD 20850 appointed as Special Master pursuant to Fed. R. Civ. P. 53.
11/21/94	366	MOTION filed by movant NATL. ASSN. BROAD. in 1:92-cv-02247 for entry of alternative protective order; attachments (3).
11/22/94	367	SUPPLEMENTAL MEMORANDUM by plaintiffs to joint motion for order of confidentiality [365-1], and defendants; exhibits (1).
11/25/94	373	RESPONSE by movants ASSN. AMER. PUB TV, CORP OF PUBLIC BROAD, PUBLIC BROADCASTING in 1:92-cv-02247 to joint motion for order of confidentiality [365-1] by defendant.

Date	No.	PROCEEDINGS
11/25/94	374	MOTION filed by movants ASSN. AMER. PUB TV in 1:92-cv-02247, movant CORP OF PUBLIC BROAD in 1:92-cv-02247, movant PUBLIC BROADCASTING in 1:92-cv-02247 for an alternative protective order.
11/28/94	375	RESPONSE by defendant USA in 1:92-cv-02247, defendant FCC in 1:92-cv-02247 in opposition to joint motion for order of confidentiality [365-1] by plaintiffs, and defendants.
11/28/94	376	RESPONSE by defendants USA in 1:92-cv-02247, FCC in 1:92-cv-02247 to motion for an alternative protective order [374-1] by PUBLIC BROADCASTING, CORP OF PUBLIC BROAD, ASSN. AMER. PUB TV.
11/28/94	377	MOTION filed by defendant USA in 1:92-cv-02247, defendant FCC in 1:92-cv-02247 for extension of briefing schedule; exhibits (9).
11/30/94	—	STATUS HEARING before Judges Thomas P. Jackson, Stephen F. Williams, Stanley Sporkin: summary judgment scheduling submitted by counsel heard and taken under advisement.
11/30/94	379	RESPONSE by plaintiffs TURNER BROADCASTING, THE TRAVEL CHANNEL, QVC NETWORK, INC., NATL. CABLE SAT. CO, INTL. FAM. ENTERT., HEARST/ABC-VIA. ENT., E! ENTERT. TELEV., BLACK ENTERT. TELEV., ARTS & ENTERT. NET., in 92-2247 TIME WARNER ENTERT. in 1:92-cv-02494, plaintiff THE LEARNING CHANNEL in 1:92-cv-02558, plaintiff DISCOVERY COM-

Date	No.	PROCEEDINGS
		MUNICA in 1:92-cv-02558 in opposition to motion for an alternative protective order [374-1] by PUBLIC BROADCASTING, CORP OF PUBLIC BROAD, ASSN. AMER. PUB TV in 1:92-cv-02247.; attachment (1).
12/2/94	381	ORDER by Judge Thomas P. Jackson: cross motions due 6/1/95 in 1:92-cv-02247, in 1:92-cv-02292, in 1:92-cv-02494, in 1:92-cv-02495, in 1:92-cv-02558; response to cross motions due 6/21/95 in 1:92-cv-02247, in 1:92-cv-02292, in 1:92-cv-02494, in 1:92-cv-02495, in 1:92-cv-02558; reply to cross motions due 6/30/95 in 1:92-cv-02247, in 1:92-cv-02292, in 1:92-cv-02494, in 1:92-cv-02495, in 1:92-cv-02558; and directing at a time to be fixed by the Special Master, but not latter than 6/1/95 the parties shall file a joint statement of undisputed facts, directing each party may file separate statements of facts, and that leave to exceed page limitations is granted.
12/7/94	387	TRANSCRIPT of Three-Judge Court before Judge Thomas P. Jackson, Judge Stanley Sporkin and Judge Stephen Williams filed for date(s) of 11/30/94.
12/19/94	391	PROTECTIVE ORDER by Judge Thomas P. Jackson setting forth procedures for handling confidential material; allowing designated material to be filed under seal.
12/20/94	398	ORDER by JAMES R. MILLER, JR., Special Master: that all discovery due 5/16/95; and motion for summary be judgment be fully briefed and submitted (except oral argument) due 6/30/95; with further instructions to counsel.

Date	No.	PROCEEDINGS
2/9/95	418	ORDER filed by Special Master James R. Miller, Jr.: amending scheduling order. (see order for details).
3/27/95	429	STIPULATED SUPPLEMENTAL PROTECTIVE ORDER by Special Master James R. Miller Jr. concerning pre-trial use of A.C. Nielsen data and setting forth procedures for handling confidential material; allowing designated material to be filed under seal.
3/27/95	430	STIPULATION AND SUPPLEMENTAL PROTECTIVE ORDER by Judge Thomas P. Jackson concerning trial use of A.C.Nielsen Data and setting forth procedures for handling confidential material; allowing designated material to be filed under seal.
4/12/95	436	ORDER OF SPECIAL MASTER: setting forth directives to parties pursuant to telephone conference call on 4/4/95 (signed 4/6/95).
5/26/95	445	MOTION filed by movant CORP OF PUBLIC BROAD in 1:92-cv-02247 for summary judgment; Appendices (3 Volumes).
5/26/95	446	SUPPLEMENTAL STATEMENT of Evidence before Congress by Public Broadcaster.
5/26/95	447	RESPONSE to special master order [418-1] re: All parties Joint Statement of Undisputed Facts.
6/30/95	469	ORDER by Judge Thomas P. Jackson, setting schedule for 7-17-95 motions hearing and with instructions to counsel.

Date	No.	PROCEEDINGS
7/17/95	—	MOTION HEARING before Judge Thomas P. Jackson; cross-motions for summary judgment heard and taken under advisement; proposed findings on undisputed facts due 8-3-95; counsel allowed until 7-19-95 to file any additional statements.
7/19/95	478	ORDER by Judge Thomas P. Jackson, directing parties to submit a single common statments of material facts established by the record by 8-1-95 and submit common objections to opposing statments of material facts by 8-15-95.
7/21/95	477	TRANSCRIPT of Three-Judge Court filed for date of 7/17/95.
7/21/95	479	ORDER by Judge Thomas P. Jackson, modifying the Court's order dated 7/19/95 to extend time to 8-8-95 to file common statements of material facts and until 8-22-95 to file common objections to the opposing statements of material facts.
7/28/95	480	TRANSCRIPT of Three-Judge Court Proceeding before Judges Stephen Williams, Thomas P. Jackson and Stanley Sporkin filed for date(s) of 7/28/95.
8/4/95	482	MOTION filed by plaintiffs in 1:92-cv-02247 for leave to submit separate statement of material facts.
8/9/95	486	ORDER by Judge Thomas P. Jackson: granting motion for leave to submit separate statement of material facts.
8/9/95	487	RESPONSE by plaintiff in 1:92-cv-02247 to order [478-1]; RE: Turner plaintiff's statement of material facts not in dispute.

Date	No.	PROCEEDINGS
8/18/95	491	MOTION filed by movant PUBLIC BROADCASTING in 1:92-cv-02247 for summary judgment; exhibits (12); declaration (1); REDACTED COPIES SUBMITTED: Memorandum of Points & Authorities in Support of Motion for Summary Judgment, Volume 2 and Volume 3.
9/18/95	495	STIPULATED ORDER by Judge Thomas P. Jackson for the Three Judge Court; directing certain records be filed with the Clerk and directing certain sealed documents be filed under seal and maintained by the Clerk until further order of the Court.
9/18/95	496	RESPONSE by defendants USA and FCC in 1:92-cv-02247 to order [494-1]; regarding motion for summary judgment; exhibits (3).
9/29/95	498	OBJECTIONS (JOINT) by plaintiffs in 1:92-cv-02247 to federal defendants' Statement [496-1].
10/5/95	500	MEMORANDUM by plaintiff NATL. CABLE TV in 1:92-cv-02495 in support of their motion for summary judgment [25-1].
10/5/95	501	REPLY by plaintiff NATL. CABLE TV in 1:92-cv-02495 to motion for summary judgment [147-1] by NATL. CABLE TV in 1:92-cv-02247, motion for summary judgment [25-1] by NATL. CABLE TV in 1:92-cv-02495.
10/5/95	502	RESPONSE (MEMORANDUM) by plaintiff NATL. CABLE TV in 1:92-cv-02495 to motion for summary judgment [227-2] by FCC, USA in 1:92-cv-02247.

Date	No.	PROCEEDINGS
10/10/95	505	(REDACTED) MEMORANDUM by plaintiff TURNER BROADCASTING in 1:92-cv-02247 in opposition to motion for summary judgment [227-2] by FCC, USA (tth).
10/10/95	506	(REDACTED) REPLY by plaintiffs TURNER BROADCASTING THE TRAVEL CHANNEL, QVC NETWORK, INC., NATL. CABLE SAT. CO., INTL. FAM. ENTERT., E! ENTERT. TELEV., BLACK ENTERT. TELEV., ARTS & ENTERT. NET. and USA NETWORKS in 92-cv-02247 in support of their cross motion for summary judgment [234-1].
10/10/95	507	(REDACTED) RESPONSE by movant ASSOC. OF INDEP. TV., movant NATL. ASSN. BROAD. in 1:92-cv-02247 in opposition to cross motion for summary judgment [234-1] by TURNER BROADCASTING.
10/10/95	508	(REDACTED) MEMORANDUM by defendants USA and FCC in 1:92-cv-02247 in support of their motion for summary judgment [227-2].
10/10/95	509	(REDACTED) MEMORANDUM by plaintiff TIME WARNER ENTERT. in opposition to motion for summary judgment [445-1] by CORP OF PUBLIC BROAD, motion for summary judgment [249-1] by NATL. ASSN. BROAD., cross motion for summary judgment [248-1] by NATL. ASSN. BROAD., motion for summary judgment [244-1] by ASSOC. OF INDEP. TV., motion for summary judgment [227-2] by FCC, USA in 1:92-cv-02247.
10/10/95	510	(REDACTED) MEMORANDUM by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 in support of their motion for summary judgment [229-1], in 1:92-cv-02247.

Date	No.	PROCEEDINGS
10/10/95	511	(REDACTED) MEMORANDUM by plaintiffs TURNER BROADCASTING, THE TRAVEL CHANNEL, QVC NETWORK, INC., NATL. CABLE SAT. CO., INTL. FAM. ENTERT., E! ENTERT. TELEV., BLACK ENTERT. TELEV., ARTS & ENTERT. NET. and USA NETWORKS in 1:92-cv-2247 in support of their cross motion for summary judgment [234-1] by TURNER BROADCASTING.
10/10/95	512	(REDACTED) REPLY by defendants USA and FCC in 1:92-cv-02247 in support of their motion for summary judgment [227-2].
10/10/95	513	(REDACTED) REPLY by movant ASSOC. OF INDEP. TV. and NATL. ASSN. BROAD. in 1:92-cv-02247 in support of motion for summary judgment [227-2] by FCC, USA.
10/10/95	514	(REDACTED) MEMORANDUM by defendants USA and FCC in 1:92-cv-02247 in opposition to plaintiffs' cross motion for summary judgment [234-1].
10/10/95	515	(REDACTED) MEMORANDUM by movant PUBLIC BROADCASTING in 1:92-cv-02247 in opposition to cross motion for summary judgment [234-1] by TURNER BROADCASTING.
10/10/95	516	(REDACTED) REPLY by movants PUBLIC BROADCASTING, ASSN/AMER. PUBLIC TV and CORP/PUBLIC BROADCAS in 1:92-cv-02247 in support of their motion for summary judgment [445-1].
10/10/95	517	(REDACTED) MEMORANDUM by movant ASSOC. OF INDEP. TV., and NATL. ASSN. BROAD. in 1:92-cv-02247 in support of the motion for summary judgment [249-1] by NATL. ASSN. BROAD., the cross motion

Date	No.	PROCEEDINGS
		for summary judgment [248-1] by NATL. ASSN. BROAD., the motion for summary judgment [244-1] by ASSOC. OF INDEP. TV.
10/10/95	518	(REDACTED) MEMORANDUM by plaintiff DISCOVERY COMMUNICA in 1:92-cv-02558 in opposition to motion for summary judgment [227-2] by FCC, USA in 1:92-cv-02247.
10/10/95	519	(REDACTED) MEMORANDUM by plaintiff DISCOVERY COMMUNICA in 1:92-cv-02558 in support of cross motion for summary judgment [234-1] by TURNER BROADCASTING in 1:92-cv-02247; exhibits (6).
10/10/95	520	(REDACTED) REPLY by plaintiff DISCOVERY COMMUNICA in 1:92-cv-02558 in support of the cross motion for summary judgment [234-1] by TURNER BROADCASTING in 1:92-cv-02247; exhibit (1).
10/11/95	521	MOTION filed by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 for summary judgment on sections 4 and 5 of the 1992 Cable Act.
10/11/95	522	MEMORANDUM (CORRECTED) by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 in support of its motion for summary judgment on sections 4 and 5 of the 1992 Cable Act. [521-1], in 1:92-cv-02247, motion for summary judgment on sections 4 and 5 of the 1992 Cable Act. [138-1] by TIME WARNER ENTERT. in 1:92-cv-02494.
10/11/95	523	REPLY by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 in support of its motion for summary judgment on sections 4 and 5 of the 1992 Cable Act. [521-1], in 1:92-cv-02247, the motion for summary judg-

Date	No.	PROCEEDINGS
		ment on sections 4 and 5 of the 1992 Cable Act. [138-1], in 1:92-cv-02494; attachments (3); exhibits (8).
10/12/95	524	RESPONSE (JOINT) by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 to NAB/INTV'S Statement of Undisputed Facts [447-1] in 1:92-cv-02247.
10/12/95	526	RESPONSE by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 to order [495-1] in 1:92-cv-02247, re: Statement of Material Facts; (FILED UNDER SEAL IN ROOM 1800).
10/12/95	527	RESPONSE by plaintiffs in 1:92-cv-02247, plaintiff in 1:92-cv-02494, plaintiff in 1:92-cv-02495 and plaintiffs in 1:92-cv-02558 to order [495-1] re: Joint Statement of Undisputed Facts; (FILED UNDER SEAL IN ROOM).
10/12/95	525	RESPONSE by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 to order [495-1] in 1:92-cv-02247 1:92-cv-02494 RE: Joint statement of ur puted facts established by the record (FILED UNDER SEAL) (1 BROWN FOLDER, 4 BOXES).
10/18/95	528	RESPONSE by movants ASSN. AMER. PUB TV, CORP. OF PUBLIC BROAD and PUBLIC BROADCASTING in 1:92-cv-02247 to order [495-1]; re: Appendices to Motion for Summary Judgment; (FILED UNDER SEAL IN ROOM 1800 - ONE (1) LARGE BROWN FOLDER).
10/19/95	529	RESPONSE by plaintiff DISCOVERY COMMUNICA in 1:92-cv-02558 to order [495-1] in 1:92-cv-02247, re: Motion for Summary Judgment; (FILED UNDER SEAL IN ROOM 1800 - ONE (1) LARGE BROWN FOLDER).

Date	No.	PROCEEDINGS
10/24/95	530	NOTICE OF FILING by movants ASSOC. OF INDEP. TV. and NATL. ASSN. BROAD. in 1:92-cv-02247 re: Volume I.A - Volume I.GG of Defendants' Additional Evidence ("DAE"); (Five (5) Boxes).
10/26/95	532	MOTION filed by defendants USA in 1:92-cv-02247 and FCC in 1:92-cv-02247 for summary judgment.
10/26/95	534	MOTION filed by plaintiff NATL. CABLE TV in 1:92-cv-02495 for summary judgment; exhibits (2).
10/26/95	535	RESPONSE by defendants USA and FCC in 1:92-cv-02247 to order [495-1] re: Memorandum in Support of Motion for Summary Judgment; Declaration of John L. Peterman; Memorandum in Opposition to Plaintiffs' Motions for Summary Judgment; Appendix to Memorandum in Opposition to Motion for Summary Judgment; Response to Statement of Material Facts Not in Dispute; Response to Turner Plaintiffs' Statement of Material Facts as to Which There is No Genuine Issue; Response to the Statement by National Cable Television Assoc., Inc. of Material Facts as to Which There is No Genuine Issue; Corrected Memorandum in Opposition to Motions for Summary Judgment; Reply Memorandum in Support of Motion for Summary Judgment; Response to Rebuttal; Response to Joint Statement of Undisputed Facts Established by the Record; Response to Statement of Material Facts Not in Dispute; (FILED UNDER SEAL IN ROOM 1800); ONE (1) BOX.
10/26/95	536	RESPONSE by plaintiffs in 1:92-cv-02247 to order [495-1] re: Memorandum in Support of Their Motion for Summary Judg-

Date	No.	PROCEEDINGS
		ment; Declarations, Exhibits; Memorandum In Opposition to Motions for Summary Judgment; (FILED UNDER SEAL IN ROOM 1800) ONE (1) BOX.
10/26/95	537	RESPONSE by plaintiff NATL. CABLE TV in 1:92-cv-02495 to order [495-1] in 1:92-cv-02247 re: Exhibit A to NCTA's Memorandum In Support of Plaintiffs' Motion for Summary Judgment and Exhibit to NCTA's Reply Memorandum in Support of Plaintiffs' Motion for Summary Judgment; (FILED UNDER SEAL IN ROOM 1800).
10/26/95	538	MOTION filed by plaintiffs in 1:92-cv-02247 for summary judgment.
10/27/95	539	NOTICE OF FILING by movants ASSOC. OF INDEP. TV. and NATL. ASSN. BROAD. in 1:92-cv-02247 of Defendants' Joint Statement of Evidence before Congress; Two Volumes.
10/27/95	540	RESPONSE by movants ASSOC. of INDEP. TV. and NATL. ASSN. BROAD. in 1:92-cv-02247 to order [495-1] re: their Memorandum in Support of Motion for Summary Judgment; Statement of Undisputed Facts and Opposition to plaintiff's Motions for Summary Judgment; (FILED UNDER SEAL IN ROOM 1800) SIX (6) BOXES.
12/12/95	541	MEMORANDUM AND ORDER by Judge Stanley Sporkin: denying motion for summary judgment. [538-1] by plaintiffs in 1:92-cv-02247, denying motion for summary judgment [534-1] by NATL. CABLE TV in 1:92-cv-02247, 1:92-cv-02495, granting motion for summary judgment [532-1] by FCC, USA in 1:92-cv-02247, denying motion for summary judgment [521-1] by TIME WARNER ENTERT. in 1:92-cv-

Date	No.	PROCEEDINGS
		02247, 1:92-cv-02494, denying motion for summary judgment [491-1] by PUBLIC BROADCASTING in 1:92-cv-02247, and dismissing without prejudice plaintiff's claim that the must-carry provisions constitute an unconstitutional taking without just compensation. Concurring opinion by Judge Thomas P. Jackson and dissenting opinion by Circuit Judge Stephen F. Williams.
12/20/95	542	ORDER by Judge Thomas P. Jackson granting intervenor-plaintiff National Interfaith Cable Coalition, Inc.'s motion for leave to dismiss intervenor-complaint and withdraw as an intervenor-plaintiff and its action is dismissed.
12/20/95	543	ORDER by Judge Thomas P. Jackson; granting plaintiff Daniels Cablevision, Inc.'s motion for leave to withdraw as a party plaintiff and its action is dismissed with prejudice.
12/20/95	544	JUDGMENT entered for the defendants and against the plaintiffs, each party to bear its own costs.
12/21/95	545	NOTICE OF APPEAL by plaintiffs in 1:92-cv-02247 from order [541-1], entered on: 12/13/95 to the Supreme Court; $5.00 filing fee paid; no service.
12/21/95	546	NOTICE OF APPEAL by movant ATLANTA INTERFAITH in 1:92-cv-02247 from order [541-1], entered on: 12/13/95 to the Supreme Court; $5.00 filing fee paid; no service.
3/1/96	547	MOTION filed by plaintiff TIME WARNER ENTERT. in 1:92-cv-02494 to amend judgment entered on 12/20/95 pursuant to FRCP 60(b); attachment (1).

Date	No.	PROCEEDINGS
3/6/96	548	ORDER by Judge STEPHEN F. WILLIAM, THOMAS P. JACKSON, STANLEY SPORKIN: granting motion to amend judgment entered on 12/20/95 pursuant to FRCP 60(b) [547-1] by TIME WARNER ENTERT. in 1:92-cv-02247, 1:92-cv-02494.

[Filed Mar. 6, 1996]

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Civil Action No. 92-2247
(and Consolidated Cases Civil Action
Nos. 92-2292, 92-2494, 92-2495, 92-2558)
(SFW, TPJ, SS)

TURNER BROADCASTING SYSTEM, INC., *et al.*,
Plaintiffs,

-against-

FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Defendants.

ORDER

Upon consideration of plaintiff Time Warner Entertainment Company, L.P.'s motion to amend this Court's judgment entered on December 20, 1995, pursuant to Fed. R. Civ. P. 60(b);

The Court having reviewed the submissions of the parties; and

The Federal defendants having consented to the amendment;

Now, on this day of March 6, 1996, it is hereby

ORDERED that the judgment in this action be amended, by adding after the last full paragraph the following sentence: "Plaintiff Time Warner Entertainment Company, L.P.'s claim arising from the Takings Clause of the United States Constitution is hereby dismissed without prejudice."

/s/ Stephen F. Williams
HON. STEPHEN F. WILLIAMS

/s/ Thomas P. Jackson
HON. THOMAS P. JACKSON

/s/ Stanley Sporkin
HON. STANLEY SPORKIN

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Civil Action No. 92-2247
(and Consolidated Cases Civil Action
Nos. 92-2292, 92-2494, 92-2495, 92-2558)
(SFW, TPJ, SS)

TURNER BROADCASTING SYSTEM, INC., *et al.*,
Plaintiffs,

-against-

FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Defendants.

MEMORANDUM OF DISCOVERY COMMUNICATIONS, INC. IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

* * * *

May 26, 1995

[Appendix A]

ELRA GROUP

OUTDOOR ANTENNAS, RECEPTION OF LOCAL TELEVISION SIGNALS AND CABLE TELEVISION

Prepared for:

The National Association of Broadcasters

Prepared by:

ELRA Group, Inc.

January 28, 1986

* * * *

* * * This means that, in all, 42% of all cable subscribers have ever had an outdoor antenna, another 57% have never had one and 1% do not recall ever having an outdoor antenna. Those with an outdoor antenna and a special device (commonly known as an A-B switch) to change back and forth between cable reception and antenna reception account for only about 1% of all cable subscribers (see Table 3.2.2, below).

* * * *

TABLE 3.2.2

CABLE/ANTENNA SWITCHING

Question/Response	*n*	Percent
"Think back to the last time you switched your cable set from cable to an antenna, what was the reason?"		
System Outage	41	71
Program/Channel not on Cable	8	14
Better Reception	5	9
Moved TV Set	3	5
Other	1	2
"When you switch from the cable to your television antenna, do you use a special switching box or do you reconnect wires in back of the set?"		
A-B Switch/Self-installed	4	7
A-B Switch/Operator-installed	2	3
A-B Switch/Other-installed	3	5
Reconnect Wires	39	67
Other Method	10	17

Note: Based on homes who ever switch cable and antenna (n=58)

Two-thirds (67%) of those who have ever switched between antenna and cable reception said that they have to reconnect the wires at the back of their sets when they do so. Another 15% said that they have an electronic switch (commonly known as an A-B Switch). Most of these were either self-installed or installed by a third

party other than the cable operator. Another 17% report other methods of switching between the antenna and cable reception.

Thus, it is relatively uncommon for cable subscribers to switch back and forth between their antennas and cable reception at this time. Only a relative handful of cable homes are equipped with special switching equipment that allows them to easily switch back and forth between antenna reception and cable service. Based on this survey, it is estimated that only about 1% of all cable households have such switching equipment at the present time.

Table 3.2.3 illustrates another aspect of the relationship between cable and antenna use. About a third (31%) of cable subscribers who ever had an antenna said they were told they would no longer need one when they subscribed to cable. A total of 11 percent actually took their antennas down at that time. This represents about a fourth of all those who once had an antenna, but removed it. Few reported that their cable operators made a trade-in offer on their antenna (1%) or took their antennas down for them (1%).

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF CONGRESSIONAL RECORD IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

VOLUME LCC

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 170]

Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

MM Docket No. 85-349

In the Matter of

Amendment of Part 76 of the
Commission's Rules Concerning
Carriage of Television Broadcast
Signals by Cable Television Systems

COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS

NATIONAL ASSOCIATION OF BROADCASTERS
1771 N Street, N.W.
Washington, D.C. 20036

* * * *

April 25, 1986

[NAB Logo]

* * * *

C. *"Reply Comments" of the Staff of the FTC*

44. In unsigned "Reply Comments" filed February 25, 1986, by "the staff of the Federal Trade Commission" ("Staff Comments"), which "do not necessarily reflect the views of the FTC,[56] it is contended that the FCC should not adopt a must carry rule. Though sharing many of the flaws of the Comments of the Justice Department, the Staff Comments differ in that they purport to contain research supporting their conclusion. Analysis shows, however, that though the FTC staff faults others for not providing "empirical evidence of a general nature regarding the likely extent of cable carriage of local broadcast stations," [57] it provides little itself. Instead, the Staff Comments construct a speculative analogy that does not involve cable at all, but an "analysis of local station carriage by 'cable-like' video distribution systems" [58] which are actually significantly different from cable systems.

45. Even if the analogy were valid, the FTC Staff sample is too small and lacking in detail to be of any value to the FCC in resolving the issues in this proceeding. The FTC Staff concedes that its "research" encompasses only 24 statellite master antenna television ("SMATV") installations, an admittedly small sample.[59] In addition, some of the data presented is already five years old, and no evidence of the representiveness of the sample is offered. There is no way to know whether the 24 systems typify anything with respect to SMATV systems, let alone regarding cable systems. The Staff Comments are silent as to how the 24 were selected or the size of the systems; it is possible, for example, that the "research" is based upon two dozen row houses divided into apartments.

---

[56] Staff Commnts at 1 n.1.

[57] *Id.* at 6.

[58] *Id.* at 6, 13-26.

[59] *Id.* at 14.

46. Beyond these threshold problems, the analogy to cable does not even begin to support the alleged lack of need for a must carry rule because the differences between cable and SMATVs far outweigh their similarities for purposes of this proceeding. In other words, SMATVs are *not* "cable-like" in many more important respects than they are "cable-like."

47. First, as the Staff Comments concede (at 13), SMATVs compete among themselves for access to multiple dwelling units. By contrast, cable operators almost never compete for access to subscriber homes in a given market. As to SMATV service, consumers often may choose among competitors. In the Washington, D.C., area, for example, the service may be obtained from any one of nine competitors. Where cable service is available in the Washington area, however, consumers have only one choice: take it or leave it. As documented in NAB's Opening Comments, cable operators (and others who do not face competition from same-service providers) need not be as responsive to consumers as those who do face same-service competition, and their incentives and need to be responsive to consumer demand differ.[60] As a result, SMATV and cable operators are not analogous, and SMATV carriage of local signals cannot indicate the likely behavior of cable operators absent all signal carriage FCC proceedings and judicial appeals.[61]

48. Another key difference is the relative market power of SMATV operators and cable operators. SMATV has attained nowhere near the nearly 50 percent national peneration achieved by cable, nor is SMATV penetration comparable to cable in individual markets, which is as

[60] NAB Opening Comments at 32-34.

[61] The Staff Comments fail to indicate whether some or all of the SMATV systems it discusses have a CARS band authorization; if so, the reported signal carriage was due to the must carry rules.

high as 90 percent.[62] There is evidence that the cable industry itself does not perceive SMATV as being anywhere close to comparable to cable: as noted in NAB's Opening Comments (at 41), a study commissioned by NCTA concludes that other technologies (including SMATV) are "no match for cable systems being introduced in the same urban markets." [63]

49. In addition, though SMATV operators are theoretically capable of selling local advertising, the Staff Comments present no indication of the extent to which this occurs, nor any suggestion that SMATV operators compete with local broadcasters to anything like the degree of increasing competition between broadcasters and cable operators in the same markets.

50. Beyond the flawed "study" comprising its heart, the Staff Comments fail to support their conclusion for several other reasons:

1) The FTC Staff argues that must carry will "distort" the marketplace, and suggests that the FCC seek repeal of cable's compulsory license.[64] But as demonstrated by NAB,[65] the marketplace is already distorted due to the absence of any must carry protection while the compulsory license continues in force, which as a practical matter it is likely to do indefinitely. Recognition of the present distortion and the need to remedy it has been almost universal, and has included all current members of the FCC.[66]

[62] For example, as of July 1984, estimates of the number of SMATV subscribers *nationwide* ranged from 290,000 to 500,000. SMATV: A Changing Environment for Private Cable, COM/TECH Report, Vol. 3, No. 2, NAB, 1984, at 6.

[63] A.D. Little Report, *supra* note 9, at 19.

[64] Staff Comments at 26.

[65] NAB Opening Comments at 39-46.

[66] NAB Opening Comments at 40-41.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF CONGRESSIONAL RECORD IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

VOLUME I.DD

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 183]

[Received Dec. 17, 1986 FCC Office of the Secretary]

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

MM Docket No. 85-349

In the Matter of

Amendment of Part 76 of the Commission's Rules
Concerning Carriage of Television Broadcast Signals
By Cable Television Systems

JOINT PETITION FOR RECONSIDERATION

Pursuant to Section 1.429 of the Commission's rules, the National Cable Television Association, Inc. ("NCTA"), the Community Antenna Television Association ("CATV"), and the National Association of Broadcasters ("NAB") [hereinafter "Joint Petitioners"], respectfully petition for reconsideration of the *Report and Order in MM Docket No. 85-349*.[1] As discussed more fully below, the Joint Petitioners submit that the Commission's goal of ensuring that cable subscribers continue to have access to the service provided by local broadcasting would be better served by the adoption of an ongoing signal carriage rule (without any A/B switch requirement) or, as a less desired alternative, by the adoption of a rule under which the cable operator may elect either to comply with an ongoing signal carriage rule or to provide subscribers with A/B switches.

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[1] The Commission's decision is summarized at 51 Fed. Reg. 44606 (Dec. 11, 1986).

[APPENDIX A]

[NCTA Logo]

National Cable Television Association

THE A/B SWITCH REQUIREMENT:
A REPORT BY THE
NCTA ENGINEERING COMMITTEE

November 1986

National Cable Television Association
1724 Massachusetts Avenue, N.W.
Washington, D.C. 20038
(202) 775-3550

THE A/B REQUIREMENT:
A REPORT BY THE
NCTA ENGINEERING COMMITTEE

On August 7, 1986, the Federal Communications Commission announced the adoption of a new set of rules relating to cable carriage of local broadcast signals. Among other elements, the new rules will require cable operators to install A/B switches for all new subscribers at no additional cost and to provide such switches free of charge to all existing subscribers who request them. The Commission believed that this requirement would impose only some "inconvenience and modest expense" on cable operators and their subscribers. (See "Fact Sheet Regarding Cable Carriage Decision," August 7, 1986).

On August 20-21 NCTA's Engineering Committee met in Washington, D.C. to discuss the T/B switch requirement. Based on that meeting, and subsequent discussions with cable operators and equipment suppliers, the Committee has concluded that the cost of providing A/B switches to all new subscribers (and to existing subscribers upon demand) will be far from modest. In addition, the technical difficulties resulting from the installation and/or use of A/B switches will be considerably more severe than a mere inconvenience. Most importantly, it is likely that most subscribers will not have any need for A/B switches for several years (if at all) and that, if and when the need for A/B switches finally arises, a good many of the switches installed in compliance with the Commission's rule will no longer be functional and will have to be replaced.

* * * *

another complicating factor is the cable industry's use of traps, decoders, or converters to secure its programming. Depending upon whether a subscriber owns a "cable-ready" television set and/or a "cable-ready" VCR, and upon the method of signal security used by the cable sys-

tem, determining what hook-ups are necessary to ensure that the subscriber is able to make full use of his or her equipment already can be something of a nightmare. Indeed, NCTA's Engineering Committee has recently produced a set of 27 separate diagrams demonstrating the different ways of connecting cable converters, television sets, and VCRs under the various circumstances that a cable operator and subscriber are likely to encounter.

The diagrams prepared by the Engineering Committee reveal that, even without the installation of an A/B switch for off-air reception, most cable hook-ups involving VCRs and converters require the use of one or more input selector devices and signal splitters, as well as extra converters and jumper cables. Moreover, the situations diagrammed do not take into account the additional complications posed by the connection of other perpheral components, such as video games, computers, and stereo decorders, receivers and speakers. Adding an A/B switch for off-air reception capability to these configurations will inevitably require the installation of still more switches, splitters, transformers, and cables, further, increasing the costs associated with the A/B switch requirement.

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS CITED IN TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MEMORANDUM OF LAW IN OPPOSITION TO DEFENDANTS' AND INTERVENORS' SUMMARY JUDGMENT MOTIONS AND IN FURTHER SUPPORT OF ITS SUMMARY JUDGMENT MOTION VOLUME I, TABS 1-20

* * * *

June 16, 1995

[Exhibit 4]

MEMORANDUM

To: Dick Hollands

From: John Abel

Subject: Must Carry Research

Date: February 12, 1987

Thanks very much for your memo of February 9 regarding "must carry" research.

I have some reservations about the specific research suggestions that you propose in your memorandum. Regarding the first idea, that we conduct a census of all television stations to determine the cable systems that have dropped the stations since the Quincy decision, here are my thoughts. First, the Research and Planning Department is proceeding with anecdotal information regarding stations that have been dropped from cable systems. They have collected a list of stations and have contacted them to find out the specific circumstances. Secondly, if we conduct the census we run into three potential problems: (1) the stations have very bad records of cable carriage and many of them simply cannot answer the question about being dropped from a system. They only know the answer to the question if they have been dropped. (2) It is very likely that only a very small proportion of the total universe of stations have been dropped from any cable system. Do we really want to make that statement? (3) If we conduct such a study everyone in the world will know about it and we will be forced into releasing some of the information which may not be favorable to our position.

Regarding your second question, I think this information would be extremely difficult to compile. I suspect that there has been more channel repositioning than actual drops so we would likely obtain a higher percentage of

stations that have been affected by such repositioning, but what are we proposing to do with this information? Finally, I wonder again if the stations have easy access to this information.

Those are my thoughts. I think the Research and Planning Department is doing something on your first point, but not in the systematic way that you describe.

If you feel strongly about this matter, I suggest that you speak with Julian and Rick about your suggestions.

cc: Eddie Fritts
Jeff Baumann
Charles Oliver
Rick Ducey
Julian Shepard

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF CONGRESSIONAL RECORD IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

VOLUME LP

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 52]

CABLE SYSTEM BROADCAST SIGNAL CARRIAGE SURVEY REPORT

A Staff Report by the
Policy and Rules Division
Mass Media Bureau
Federal Communications Commission
September 1, 1988

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CABLE SYSTEM BROADCAST SIGNAL CARRIAGE SURVEY REPORT

INTRODUCTION

1. This report presents a summary of the data compiled in response to a request from members of Congress to investigate the signal carriage practices of cable systems with respect to broadcast television stations in the absence of mandatory carriage rules.[1]

SURVEY PROCEDURES

2. To comply with this request, the Commission sent survey forms to 8,504 cable systems and 1,356 television stations seeking data regarding three matters: noncarriage of signals that would have had must carry status under the rules in effect prior to July 19, 1985[2]; repositioning of such signals; and payments for carriage of such signals.[3] Participation in this study was voluntary.

[1] *See* letter dated February 19, 1988, addressed to Chairman Dennis Patrick and signed by Senator Ernest Hollings, Senator Daniel Inouye, Congressman John Dingell and Congressman Edward Markey. This letter requested that the Commission submit an initial report by September 1, 1988.

[2] On July 19, 1985, the U.S. Court of Appeals for the District of Columbia Circuit held that the Commission's must carry rules were unconstitutional. *See Quincy Cable TV Inc. v. FCC*, 768 F. 2d 1434 (D.C. Cir. 1985) (hereinafter *Quincy*). The pre-*Quincy* must carry rules are included as Appendix C. On August 7, 1986, the Commission adopted a new interim set of must carry rules in response to the *Quincy* decision which were based on a proposal submitted by industry groups. These rules are attached as Appendix D. These rules were subsequently invalidated by the U.S. Court of Appeals for the District of Columbia Circuit. *See Century Communications Corp. v. FCC*, No. 86-1683, 835 F. 2d 292 (D.C., December 11, 1987) and Clarification *Order* issued by D.C. Cir. Court regarding *Century Communications Corp. v. FCC*, No. 86-1683, 837 F. 2d 517 (D.C. Cir., January 29, 1988).

[3] The survey forms sent to broadcast television stations and cable television systems are attached as Appendices A and B, respectively.

The information below is based on the data received from 4,303 cable systems and 912 television stations, representing a return rate of usable questionnaires of 50.6% and 67.3% for these services, respectively.[4]

Editing Procedures

3. All forms were reviewed for completeness. Where information was incomplete or unclear, efforts were made to obtain usable information either through readily available data sources or by contacting respondents for additional information. For example, in cases where a cable operator indicated the call sign of a station, but did not provide the station type, we were able to add the missing data. We also found that some participants included written responses that could be quantified without contacting the participants further. In other instances, we telephoned respondents to obtain clarifications or additional information. However, efforts in this regard were not completely successful, and approximately 1% of the returned questionnaires were not usable due to unclear or incomplete information. Furthermore, due to time limitation, we did not verify the data. Specifically, we were unable to verify the accuracy of data with regard to the must carry status of specific stations, and thereby had to rely on survey participants for the accuracy of the data provided.[5] Thus, in general, unless specifically noted, the data tabulated below reflects the information directly as

[4] All of the returned forms are available in the files of the Commission for public inspection and copying.

[5] We wish to point out that we found some stations listed as having must carry status that were readily recognized as inaccuracies (*e.g.*, stations from outside the United States which did not have carriage rights under the rules) and as such were not included in the tabulations. We also note that we received many inquiries regarding the provisions of the pre-*Quincy* must carry rules which suggests that many of those responding to the survey had an incomplete understanding of the obligations created by those rules.

submitted by the participating cable systems and television stations. All of the forms received are available in the files of the Commission for public inspection and copying.

Data Analysis and Limitations

4. The data provided by broadcast stations and cable ssytems participating in this study have been tabulated, as described below, to indicate the signal carriage practices of cable systems with respect to television stations that were entitled to carriage under the rules in effect prior to July 19, 1985. While the tables summarize most of the data elements included on the survey forms, some have been excluded, primarily due to insufficient response. In addition, while an attempt has been made to present equivalent tables derived from the broadcast and cable responses, this was not possible in all cases since the questions asked on the two forms were not always identical. Further, it is important to note that direct comparisions of the broadcast station and cable system responses cannot be made because the universe of responding companies differs.

5. In addition to the tables below, the attached Appendix E consists of three grids depicting raw data that were used to generate some of the information that appears in the associated tables. The grids were developed from surveys returned by cable operators only. Grid 1 represents the number of cable systems that have dropped or denied carriage to one or more television stations by the following categories: the number of stations dropped or denied carriage, the channel capacity of the system, and the subscriber count of the system. The number of incidences of dropped or denied carriage by type of station and type of replacement programming is also displayed on this grid. Grid 2 indicates the number of incidents of repositioning of stations by cable channel capacity, subscriber count, type of station, whether the station began operation after July 19, 1985, and the cable tier on which the repositioning occurred. Grid 3 displays the number of incidents of payment for carriage or channel position by cable system channel capacity, subscriber count, type of station, whether the station began operation after July 19, 1995, amount or type of payment, and frequency of payment.

6. As with any research design, there are factors that limit the interpretation of the data. As previously mentioned, we did not conduct reliability and validity measures on the data or sample, due to time limitations. Additionally, in survey research a common concern is the notion that those not responding to the survey may represent a specific subset of the sample, thereby building into the survey analysis a particular response bias. In this study the concern of response bias is mitigated by the response rate; a response rate achieved after only one follow-up reminder. Furthermore, respondents appear to have difficulty understanding some of the terms included in the questionnaire. For example, in response to a question requiring identification of a signal as a network affiliate, commercial independent, non-commercial ETV (PBS), or other (i.e., religious specialty, etc.), some respondents identified the Home Shopping Network as fitting into each of these categories. Finally, it is evident that some of the responding parties misunderstood or misapplied the mandatory signal carriage rules. These rules are complex requiring information on market rankings and boundaries (35-mile zones), signal contour locations, and county or community audience survey information.

SUMMARY OF SURVEY RESULTS

Stations Dropped or Denied Carriage

7. Broadcast stations were asked if they had been dropped or denied carriage by cable systems on which they would have been entitled to carriage rights under the

must carry rules that were in effect prior to July 19, 1985. In cases of noncarriage, television station respondents were requested to provide information regarding such cable system and to indicate whether they were a station that began operation after July 19, 1985, that had been denied carriage or station that commenced operation prior to that date that had been dropped from cable carriage.[6] The survey form sent to cable systems requested identifying information regarding any broadcast signals that would have been entitled to must carry rights under the rules that existed prior to July 19, 1985 that they had deleted or declined to carry.

8. Table 1 categories broadcast station respondents by their station type (*i.e.*, network affiliate, commercial independent, non-commercial ETV, or other). For each station type, the table shows the number of stations that were dropped or denied carriage by one or more cable systems and the number of incidences of stations being dropped or denied carriage.[7] Further, the number of incidences has been tabulated to indicate instances where stations commencing operation after July 19, 1985, have been denied carriage, stations existing prior to that date have been dropped, and stations that claim that they have never received carriage even though they commenced operation prior to the *Quincy* decision and thus were entitled to carriage. From the information provided by cable system respondents, Table 2 indicates the number

[6] In reviewing the forms, we found that there were stations that began operation prior to the *Quincy* decision that had never been carried by cable systems on which they were entitled to must carry status. Where stations provided information regarding such an occurrence, they were included in a separate category. Stations providing this information, however, were not asked whether they had formally requested carriage as was required under the pre-*Quincy* rules.

[7] For example, a station that has been dropped by two cable systems is counted once under the number of stations and accounts for two incidences of a station being dropped by cable systems.

of cable systems that report dropping or denying carriage to one or more of each station type. It also indicates the number of stations of each type that cable systems report dropping or denying carirage and the number of such incidences. Furthermore, the number of incidences has been tabulated to indicate instances where stations have been dropped and where they have been denied carriage.

9. In response to the concerns expressed in the *Quincy* decision, the Commission adopted a narrower set of carriage rules on August 7, 1986. The quesionnaire did not specifically ask for information concerning carriage under these rules. Table 2A attempts to create a subcategory of the data for purposes of comparison with these rules. This table is based on information provided by cable system survey respondents and classifies incidences of stations being dropped or denied carriage by station type. However, in accordance with the provisions of the interim must carry rules adopted on August 7, 1986, all cases where the broadcast station is located more than 50 miles away from the cable system, all commercial signals dropped or denied carriage by systems of less than 21 channels, all duplicating ABC, NBC, and CBS network affiliates, and stations readily ascertainable as having insufficient audience levels to meet the "qualified station" definition have been eliminated. For purposes of this table, only ABC, NBC, and CBS stations were treated as network affiliates. PBS stations, where reported as affiliates, were moved to the "non-commercial ETV" column. Univision and Home Shopping Network affiliates were moved to the "other" column. Only the Home Shopping Network stations were readily ascertainable as having insufficient audience to be "qualified" for carriage. Also not deleted were other stations whose audience levels on a community-by-community basis could not be ascertained within the constraints of this study, non-commercial "satellite" signals, or signals subject to interference. Thus, this table is intended to provide only a rough comparison with

Table 2. A more complete version would require either a new survey or the independent acquistion of a large amount of additional information.

10. Table 3 is derived from the broadcast station survey forms and shows the number of stations that have been dropped or denied carriage by the number of systems on which such actions have occurred. Table 4 tabulates the reporting cable systems by the number of stations they have deleted or declined to carry.

11. Broadcast stations were asked to provide the following information for any cable system on which they have been dropped or denied carriage: (1) number of subscribers; (2) number of activated channels; and (3) the programming substituted by the cable system for the signal dropped or denied carriage. In many cases, the broadcast station respondents were unable to provide these data. Thus, tables based on the inadequate information provided would have been of little value and are not included herein. However, this type of information was provided by the cable systems and Tables 5 through 8 indicate the incidences of broadcast stations being dropped or deleted by the characteristics of the cable system. Table 5 tabulates the reporting cable systems by the number of former must carry signals that have been deleted or denied carriage by categories of system channel capacity. Table 6 tabulates this information on the basis of number of subscribers. Table 7 tabulates the incidences of stations being dropped or denied carriage by the distance, in miles, between the station's community and the cable system's headend. Finally, Table 8 indicates the types of signals substituted by cable operators for the stations not being carried.

TABLE 1

STATIONS THAT WERE DROPPED OR DENIED CARRIAGE
(As reported by 912 television stations)

Type of Station	No. of Sta.-tions Re-porting	No. of Sta-tions Dropped or Denied Car-riage	Total Inci-dences of Drop/ Deny Car-riage *	A/	B/	C/
Network Affiliate	452	87	269	49	211	9
Commercial Independent	186	83	710	389	270	51
Non-commercial ETV (PBS)	237	80	345	88	234	23
Other (relig., specialty)	37	30	209	122	61	26
Grand Total	912	280	1533	648	776	109

* This column represents the total of columns A, B, and C and is the number of incidences of cable systems dropping or denying carriage of each type of station. Although this column adds to 1,533 individual instances of dropped or denied carriage, there is no way to determine the number of separate cable systems which dropped or denied carriage from the television station survey form.

A/ This column represents the number of incidences of cable systems denying carriage to a station that commenced operation on or after July 19, 1985.

B/ This column represents the number of incidences of systems dropping a station.

C/ This final column indicates the number of incidences where cable systems have denied carriage to stations that began operation prior to July 19, 1985. Although the form did not have a code to acknowledge such a possibility, a number of stations volunteered this information and it is tallied in this column.

TABLE 2

STATIONS THAT WERE DROPPED OR DENIED CARRIAGE
(As reported by 4303 cable systems)

Type of Station Dropped/Denied Carriage	No. of Cable Systems That Dropped/ Denied Carriage to One or More Stations *	No. of Stations Dropped or Denied Carriage	Total Incidences of Drop/ Deny Carriage	A/	B/
Network Affiliate	380	276	595	336	259
Commercial Independent	316	184	485	150	335
Non-Commercial ETV (PBS)	347	153	463	177	286
Other (relig., specialty)	195	91	277	117	160
Grand Total		704	1820	780	1080

Total number of systems that did not drop or deny carriage to any stations: 3434

Total number of systems that dropped/denied carriage to one or more stations: 869

* This column, if totaled, will exceed the number of cable respondents indicating that they dropped or denied carriage to broadcast stations. Some cable systems dropped or denied carriage to more than one type of signal, therefore, these cable systems are accounted for in more than one row of data.

A/ This column represents the number of incidences of cable systems dropping a station.

B/ This column represents the number of incidences of cable systems denying carriage to a station that commenced operation on or after July 19, 1985.

TABLE 2A

DROP/DENIED CARRIAGE REPORT UNDER AUGUST 7, 1986 INTERIM MUST CARRY RULES *
(As reported by cable systems)

Type of Station Dropped/Denied Carriage	Number of Stations	Number of Incidences Dropped/Denied Carriage	A/	B/
Major Network Affiliates	0	0	0	0
Commercial Independent	117	277	91	186
Non-Commercial ETV (PBS)	96	282	134	148
Other (religious, specialty)	66	194	90	104
Grand Total	279	753	315	438

* See paragraph 8 above for explanation of this table.

A/ This column represents the number of incidences of cable systems dropping a station.

B/ This column represents the number of incidences of cable systems denying carriage to a station that commenced operation on or after July 19, 1985.

TABLE 3

NUMBER OF SYSTEMS DROPPING OR DENYING CARRIAGE
(As reported by television stations)

Number of Systems Dropping or Denying Carriage	Number of Stations	Percent of Stations Reporting
0	632	69.3
1	99	10.7
2	42	4.5
3	26	2.9
3	16	1.9
5 or more	97	10.7

Total number of reporting broadcast stations 912

Total number of stations that report being dropped or denied carriage by cable systems 280

TABLE 4

NUMBER OF STATIONS DROPPED OR DENIED CARRIAGE
(As reported by cable systems)

Number of Stations That Were Dropped/Denied Carriage	Number of Cable Systems	Percent of Cable Systems Reporting
0	3434	79.8
1	437	10.2
2	191	4.4
3	128	3.0
4	52	1.2
5 or more	61	1.4

Total number of reporting cable systems 4303

Total number of systems that report dropping or denying carriage to television stations 869

TABLE 5

DROP/DENIED CARRIAGE REPORT BY CHANNEL CAPACITY
(As reported by cable systems)

Number of Stations Dropped/ Denied	Number of Cable Systems	Channel Capacity of Cable System					
		Not Reported	1-12	13-20	21-35	36-54	55+
0	3434	55	487	786	1669	382	55
1	437	7	18	37	290	81	4
2	191	3	6	26	107	48	1
3	128	0	8	14	76	30	0
4	52	0	3	6	31	10	2
5 or more	61	0	3	7	34	16	1

TABLE 6

DROP/DENIED CARRIAGE REPORT BY SYSTEM SIZE (NUMBER OF SUBSCRIBERS)
(As reported by cable systems)

Number of Stations Dropped/Denied	Number of Cable Systems	Not Reported	Number of Subscribers (000) <1	1<2.5	2.5<5	5<10	10<25	25+
0	3434	180	1442	609	404	325	315	209
1	437	4	82	93	59	71	90	38
2	191	6	41	34	34	35	24	17
3	128	5	0	26	20	17	18	17
4	52	0	8	10	8	7	12	7
5 or more	61	0	14	15	2	4	14	12

TABLE 7

DROP/DENIED CARRIAGE REPORT BY DISTANCE BETWEEN STATION COMMUNITY OF LICENSE AND SYSTEM HEADEND
(As reported by 869 cable systems)

Type of Dropped/ Denied Carriage	Number of Incidences Dropped/ Denied Carriage	Not Reported	Number of Incidences of Drop/Denied Carriage Number of Miles 1-35	36-50	51+
Commercial Network Affiliate	595	8	76	182	879
Commercial Independent	485	8	240	138	99
Non-Commercial ETV (PBS)	463	7	143	157	156
Other (religious, specialty)	277	0	186	64	27
Total Incidences of Dropped/Denied Carriage	1820	23	645	491	661

TABLE 8

DROPPED/DENIED CARRIAGE SIGNAL REPORT
BY TYPE OF SUBSTITUTE PROGRAMMING
(As reported by 869 cable systems)

Type of Substitute Programming	Number of Incidences Drop/Deny Carriage	Number of Incidences Drop Carriage	Number of Incidences Deny Carriage
Not Reported	585	74	511
Local Commercial Station	69	62	7
Local Non-Commercial Station	57	52	5
Distant Broadcast Signal	34	31	3
Basic Cable Network	462	442	20
Pay Cable Channel	36	34	2
Satellite (Superstation)	26	26	0
Scroll or Text Information	11	11	0
Other	24	21	3
No Replacement	516	27	489
Total Incidences	1820	780	1040

Stations Repositioned

12. Television station survey participants were asked whether their signals had been repositioned, *i.e.*, carried on a channel other than that on which it broadcasts, by any cable system on which it would have been entitled to carriage under the must carry rules that were in effect prior to July 19, 1985. Cable systems were requested to indicate whether they had repositioned any signal entitled to carriage under the pre-*Quincy* must carry rules.

13. Table 9 divides the broadcast stations that indicate that they have been repositioned by type (*i.e.*, network affiliate, commercial independent, non-commercial ETV, or other). For each station type, the table shows the number of stations responding to the survey, the number of stations [8] that have been repositioned, and the number of incidences of repositioning.[9] Table 10 indicates the number of signals previously qualifying for must carry status that cable systems report having repositioned. For each station type, the table shows the number of cable systems that have repositioned one or more stations of that type, the number of stations that have been repositioned, and the number of incidences of repositioning. Tables 11 and 12 tabulate the stations that were repositioned by station type and the cable system service tier of their current channel positions, as reported by television station and cable system respondents, respectively.

14. Finally, cable operators that have repositioned signals were asked to provide their reasons for taking such

[8] A television station that has been repositioned is counted only once no matter how many times it has been repositioned. That is, a station that has been repositioned by more than one cable system counts as one entry in this table, the same as a station that has been repositioned by only one system.

[9] That is, a television station that has been repositioned on three separate cable systems would represent one repositioned station and three incidences of repositioning on this table.

action. Broadcasters were not asked to provide the same information because it was assumed that it would be unlikely they would know the reasons they had been repositioned. The information provided by cable respondents regarding their reasons for repositioning broadcast signals can be divided into two categories—marketing decisions and technical reasons. Table 13 summarizes their various responses within these two categories and indicates the frequency of each response as a percent of the reasons for repositioning provided by cable survey participants.

TABLE 9

TELEVISION STATIONS REPOSITIONED BY STATION TYPE
(As reported by television stations)

Type of Station	No. of Stations	Reporting No. of Stations Repositioned	Total Incidences of Repositioning *
Network Affiliate	452	131	343
Commercial Independent	186	82	475
Non-commercial ETV (PBS)	237	88	417
Other (relig., specialty)	37	12	39
Grand Total	912	313	1274

* This column represents the total number of incidences of cable systems repositioning each type of station. Although this column adds to 1,274 individual incidences of repositioning, there is no way to determine the number of separate cable systems which repositioned broadcast signals from the television station survey form.

TABLE 10

TELEVISION STATIONS REPOSITIONED BY STATION TYPE
(As reported by cable systems)

Type of Stations Repositioned	Number of Cable Systems That Repositioned One or More *	No. of Stations Repositioned	Total Incidences of Repositioning
Commercial Network Affiliate	504	398	946
Commercial Independent	549	236	916
Non-Commercial ETV (PBS)	432	182	541
Other (religious, specialty)	83	41	92
Total		857	2495

Total number of reporting cable systems: 4303

Total number of cable systems reporting repositioning: 974

* This column, if totaled, will exceed the number of cable systems reporting that they have repositioned broadcast stations. Some cable systems repositioned more than one type of signal, therefore, these cable systems are accounted for in more than one row of the table.

TABLE 11

TELEVISION STATIONS REPOSITIONED BY REPORTED TIER
(As reported by 313 television stations)

Type of Station Repositioned	On Basic Tier	Not on Basic Tier	Not Reported	
Commercial Network Affiliate	285	34	24	
Commercial Independent	416	49	10	
Non-Commercial ETV (PBS)	304	65	48	
Other (religious, specialty)	28	10	1	
Total	1033	158	83	= 1274 Incidences of Repositioning

TABLE 12

TELEVISION STATIONS REPOSITIONED BY REPORTED TIER
(As reported by 974 cable systems)

Number of incidences of repositioning of stations:

Type of Station Repositioned	On Basic Tier	Not on Basic Tier	Not Reported	
Commercial Network Affiliate	937	4	5	
Commercial Independent	899	13	4	
Non-Commercial ETV (PBS)	531	8	2	
Other (religious, specialty)	89	3	0	
Total	2456	28	11	= 2495 Incidences of Repositioning

TABLE 13

REASONS FOR REPOSITIONING

(Based on a sample of approximately 600 incidences of repositioning as reported by cable systems)

Reason	Share of Responses
A. Marketing Decisions	85%
1. To place a station on the same channel number as its over-the-air broadcast channel	21%
2. To diversify channel line-up and unspecified "marketing decision"	14%
3. To achieve common channel alignment on co-owned systems or to conform to a regional channel line-up with other cable systems	10%
4. General channel realignment and customer convenience	9%
5. To separate duplicate network signals that are within close proximity	3%
6. "Tier meltdown" *	3%
7. Station not entitled to on-channel carriage according to cable operator	3%
8. Miscellaneous marketing decision **	26%
B. Technical Reasons	15%
1. Due to the expansion of the channel capacity of the cable system	5%
2. Technical reasons occuring as a result of off-the-air- interference from a local signals	3%
3. To move off aeronautical channels	3%
4. Part-time stations became full-time stations such that two channels are now needed where one previously sufficed	1%

5. Technical reasons relating to the scrambling of pay channels	1%
6. Miscellaneous technical reasons **	2%

* "Tier meltdown" refers to the combining of several tiers into one, thereby changing the configuration of services offered.

** No single reason accounts for more than 1%.

Payments or Considerations for Carriage

15. We sought information regarding monetary payments or other considerations made by broadcasters to cable systems on which they formerly were entitled to must carry status for carriage of their signals or for a desired channel position. Broadcasters making such payments to cable systems were asked to identify the relevant cable systems and to indicate the dollar amount, where applicable, or type of payment. Cable operators providing responses regarding payments made or other considerations rendered by broadcast stations either for carriage or for channel position were asked to identify affected station, whether the payment/consideration was for carriage or channel position, and the dollar amount or type of payment. Both questionnaires specified possible considerations, other than monetary forms of payment, such as advertising time, production assistance, equipment, and advertising sales. We also asked respondents to indicate whether the payment/consideration was on an annual basis, one time only, or on some other basis.

16. Where the type of payment/consideration or its basis was something other than that specified on the form, we asked the responding broadcaster or cable operator to provide additional information. Other types of payment for carriage or channel position indicated include payment for new channel cards, payment for new equipment and/or for the labor costs associated with the new equipment, payment for copyright liability [10] and fees charged per subscriber. Payments, based on other than a per year or single payment, include monthly or quarterly payments, use of equipment in lieu of payment, covering the costs of printing new channel guides and notification of subscribers. Charitable grants or contributions to hospitals

[10] It is unclear what copyright liabilities cable systems are incurring from carriage of such signals since the former must carry signals were not subject to such payments.

or colleges were also used as bases for payment. We also observe that a number of cable system respondents indicated that stations offered to pay for carriage or channel position but the systems declined the offers. Further, a few systems indicated that they had requested payment for carriage or channel position, but the stations declined to pay.

17. Table 14 summarizes the information provided by broadcast stations concerning payments or other considerations rendered for cable carriage or channel position by amount or type of payment/consideration and the basis of such payments/considerations. Table 15 details similar information regarding payments or considerations received by cable systems from broadcast stations for carriage or channel position.

TABLE 14

BROADCAST STATION PAYMENT/CONSIDERATIONS
(As reported by 65 television stations)

Amount or Type of Payment	Number of Payments/ Considerations	Per Year	Single Payment	Other
1 $1-$5,000	95	65	30	0
2 $5,001-$15,000	28	17	11	0
3 $15,001-$25,000	3	2	0	1
4 $25,001-$35000	1	1	0	0
5 $35,001-$45,000	1	0	0	1
6 Above $45,000	2	2	0	0
7 Advertising Time	12	5	6	1
8 Production Assistance	1	0	1	0
9 Equipment	143	0	141	2
10 Advertising Sales	0	0	0	0
11 Other	10	0	5	5
12 Combination of Above	30	0	18	17
Total Number of Payments/ Considerations Made by Television Stations	326			

TABLE 15

BROADCAST STATION PAYMENT/CONSIDERATIONS
(As reported by 107 cable systems)

Amount or Type of Payment	Payments To Systems	Per Year	Single Payment	Other
1 $1-$5,000	20	12	5	3
2 $5,000-$15,000	13	9	2	2
3 $15,001-$25,000	0	0	0	0
4 $25,001-$35,000	0	0	0	0
5 $35,001-$45,000	0	0	0	0
6 Above $45,000	0	0	0	0
7 Advertising Time	13	4	0	9
8 Production Assistance	0	0	0	0
9 Equipment	45	0	35	10
10 Advertising Sales	0	0	0	0
11 Other	19	1	9	9
12 Combination of Above	15	0	12	3
Total Number of Payments/ Considerations Received by Cable Systems	125			

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME I

* * * *

May 26, 1995

[Exhibit 11]

ADVERTISING REVENUES PER TELEVISION HOUSEHOLD:

A Market by Market Analysis

[NAB Logo]

* * * *

Table 4
Total Time Sales per TVHH
By Census Region

Region	States in Region	Total Time Sales per TVHH
New England	CT, ME, MA, NH, RI, VT	$143.45
Pacific	AK, CA, HI, OR, WA	141.15
South Atlantic	DE, DC, FL, GA, MD, NC, SC, VA, WV	131.79
Mountain	AZ, CO, ID, MT, NV, NM, UT, WY	121.16
Mid Atlantic	NJ, NY, PA	120.45
E. N. Central	IL, IN, MI, OH, WI	120.05
W. S. Central	AR, LA, OK, TX	112.36
E. S. Central	AL, KY, MS, TN	104.10
W. N. Central	LA, KS, MN, MO, NE, ND, SD	91.55

Five-Year Trend

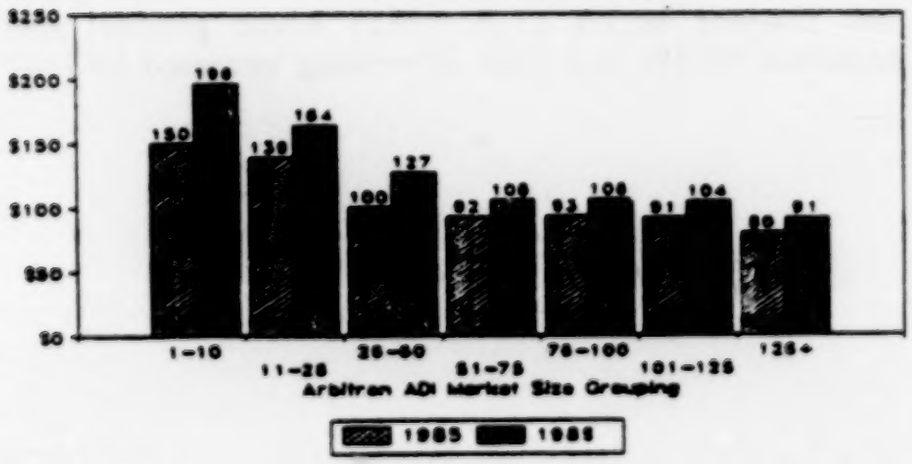
Total Time Sales

Since 1985 the television industry has seen a 26.4% increase in total advertising revenues.[6] For advertising revenues received by stations, national spot advertising rose 23.3% and local advertising increased 36.1%.[7] While these are healthy increases, they are lower than the previous five-year period (1981-1985) where national spot increased 60.3% and local advertising increased 69.7%.[8]

Even though the most recent industry increases are lower they are still indicative of a growing industry. When examined on a per television household basis, the television industry is still showing initiative in generating increased revenues for their existing product, televison households. Of the markets examned total time sales per television household increased 16.7%, national/regional advertising 12.6%, and local advertising, 21.4%. These increases are in addition to any increased revenues resulting from growth in the size of the markets (i.e., growth in television households).

The growth in total time sales per television household was generally the same for the different market groupings. Only the largest markets, ADIs 1-10, and mid-sized markets, ADIs 26-50, showed stronger growth. Markets of ADI size 1-10 saw, on average, a 30.9% increase in total time sales per television household; ADIs 26-50, 26.8%. All of the others experienced growth of only a few percentage points different from the national average (16.7%). Figure 4 shows the average values for total time sales in 1985 and 1989.

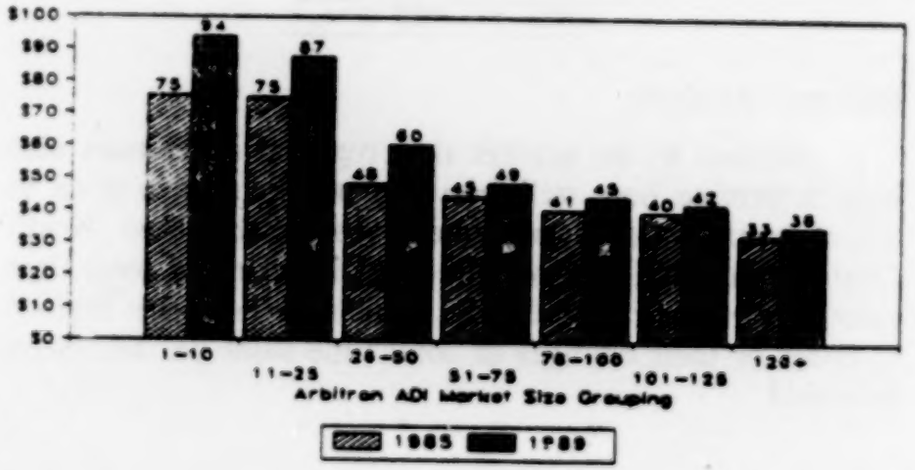
Figure 4
Total Time Sales per TVHH, 1985-1989
By Market Grouping



National/Regional Advertising

As for national/regional advertising, the largest markets experienced substantially stronger gains than markets of smaller size, although markets of all sizes did show increases. The average increase across all markets was 12.6%. The top three market groupings, ADIs 1-10, 11-25, and 26-50, all showed increases greater than the overall average. Markets of ADI size 26-50 experienced the largest growth, 24.7%, while the largest markets, ADIs 1-10 experienced a 24.3% increase in national/regional advertising on a television household basis. Figure 5 shows the 1985 and 1989 values for the market size groupings.

Figure 5
National/Regional Advertising per TVHH, 1985-89
By Market Grouping

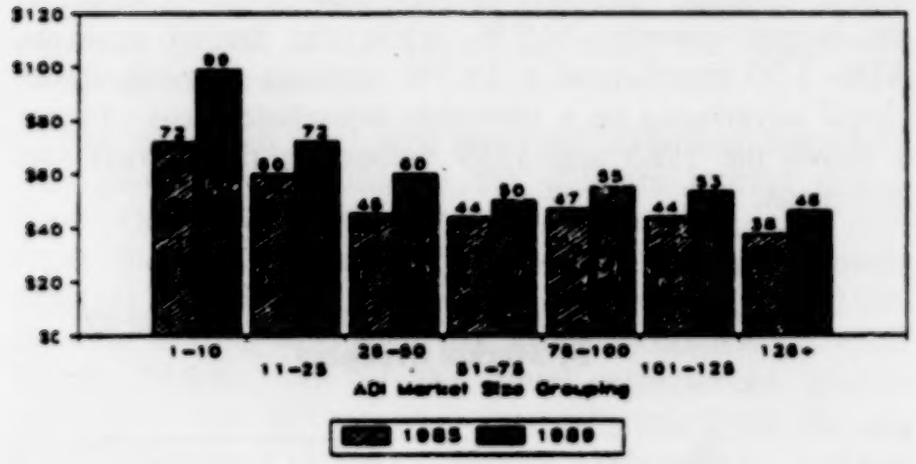


Local Advertising

On the other hand, local advertising growth showed stronger growth across more market sizes. The average across all markets for local advertising per television household was 21.4%. The smallest markets, ADIs 126 and above, experienced a 23.6% increase. The top ten

markets, as well as ADI markets, 26-50 saw increases of over 30%. Figure 6 shows the 1985 and 1989 values for local advertising on a television household basis.

Figure 6
Local Advertising per TVHH, 1985-89
By Market Grouping



Regional Analysis

In addition to the market size, regional differences also help determine how well television markets have done in recent years. On a percentage basis, the East North Central markets improved the most in terms of total time sales, given their population. Table 5 lists the regions in order of their changes of total time sales per television household.

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME I

* * * *

May 26, 1995

[Exhibit 6]

[NAB Logo]

Research & Planning Memorandum

To: Jeff Baumann

From: Rick Ducey

Re: Broadcast Television and Cable Competition

Date: January 30, 1990

I wanted to follow up on my observation to you that NAB has been producing other research which presents a theme similar to that evoked in Mark Fratrik's *Broadcast Financial Journal* piece.

One major study, co-sponsored by NAB and TVB was released at NAB '89, "Television in Transition: The Values of Broadcast Television in a Changing Marketplace." The study covering five local markets, is an examination of the benefits of television as an advertising medium and in particular, to position the relative benefits of broadcast television in a cable context. The study acknowledges cable strengths in certain areas, for example interconnects in markets like Tulsa, OK. The foundation of the study is an examination of audience delivery by broadcast and cable sources in these markets.

The basic conclusion of the study is that broadcast television has enduring marketing values which are recognized by advertisers and that the audiences delivered by broadcast television are far larger than cable's audience delivery.

We have produced other pieces, but this is probably the best known piece of research you should be aware of. I am attaching a copy for your information.

cc: Eddie Fritts
John Abel
Jim May
Ben Ivins

TELEVISION IN TRANSITION
THE VALUES OF BROADCAST TELEVISION IN A CHANGING MARKETPLACE

A Study Commissioned by the
National Association of Broadcasters
and the Television Bureau of Advertising

Dr. Philip D. Jursek and Norman S. Hecht
NORMAN HECHT RESEARCH

[NAB Logo]

* * * *

INTRODUCTION: BACKGROUND FOR THE STUDY

This document reflects on the values of local broadcast television as an advertising medium . . . as it nears its fiftieth year of commercial activity and contends with the currents of rising competition.

On April 30, 1939, President Franklin D. Roosevelt made an historic appearance on television in a speech that was broadcast from the New York World's Fair. Although commercial television was not authorized until 1941, FDR's speech is a convenient historic perspective from which to view the progress of what has been termed "the most powerful medium of communication" ever invented.

And the progress has been substantial, with television now an integral part of the fabric of our society, a vital force that has homogenized the American landscape and served as a unifying link with other quarters of the "global village."

As a commercial institution, television has become an important economic force relied upon by national, regional and local advertisers to communicate information about products, services, stores and institutions in the competitive struggle for "share of voice" and for building brand and company identity; by incumbents and by individuals seeking political office who wish to shape and mold public opinion; and by Federal, State and Local governments that use the medium for recruitment, for promotion of tourism and travel and for a variety of other public sector information requirements.

In 1988, it was estimated that the direct economic impact of television advertising amounted to $25.7 billion in revenue (inclusive of national and local broadcast and cable television volume). U.S. cable television subscribers

paid an additional $12.9 billion in subscriber fees for basic and pay cable television services.

Of course, television exerts substantial economic impacts in other sectors, . . . in terms of video hardware and software sales; programming investments; equipment and facilities; wages and employment . . . even home shopping revenues.

Over the span of its fifty years, television has become recognized as an advertising force of uncommon power and effectiveness. With but a few exceptions, most established products and virtually all new entries to the market have relied on a strong foundation of brand equity that could best be supplied by television advertising.

Recently, however, broadcast television has been the victim of a great deal of negative editorial opinion in the nation's news media and advertising trade press. A lot of it has to do with changes that have been forged since 1980, by the growth of cable television as a consumer utility and competitive advertising force.

As cable has advanced its cause aggressively, the media trade press and many influential industry experts have become its missionaries. The virtues of cable; its rapid growth; the choice it provides viewers; its programming diversity and "narrowcast" potential; its demographic flexibility as a marketing and promotion tool; its growing advertiser acceptance have all been documented. All of these virtues may be true, to a degree . . but they can be misleading unless they are considered within the context of cable's current market standing as a relatively new advertising medium in relation to that of the established industry leader . . . broadcast television.

It is one thing to consider that cable has finally reached "critical mass" or penetration of more than 50% of U.S. TV households. It is another thing to be reminded that broadcast television's penetration level is 98%. Cable's audience growth frequently receives headlines . . . yet

cable audience levels continue to be a fraction of broadcast television's.

Similarly, the rapid advertising expansion of cable is heralded, without sufficient consideration for the fact that, last year, the projected net gain for broadcast television advertising was $1.6 billion dollars . . . while cable television advertising revenues, nationally and locally, amounted to only $1.16 billion!

There is no question that, as commercial television approaches its fiftieth anniversary, it is a medium in transition. It is now a mature medium well into the established phase of an intensive intramural competition. And, with audience fragmentation, fifteen second commercials, remote control buttons, video cassette recorders and other artifacts of its maturity, it is without question a different medium.

But many of its marketing values persist: broad national coverage; high reach in virtually every community in the country; efficient delivery of "mass" audience; highly promotable and merchandisable programming that a vast majority of Americans want to watch; and the ability to exert powerful impact on the consumer market. And now, with cable, television provides still more avenues to use in reaching and influencing the viewing public. Though the medium has matured and changed, its values remain substantial.

The golden anniversary of broadcast television is a time to reflect upon, and celebrate, these values . . . which will be the cornerstone of the medium's marketing thrust into the 1990s and beyond. To set the agenda, the National Association of Broadcasters and the Television Bureau of Advertising have joined forces to fund an in-depth reappraisal of the audience values and potentials of television as an advertising medium.

Norman Hecht Research was commissioned to undertake the first stage of this research . . . a broad review of

commercial television today . . . including an objective assessment of the respective roles played by local broadcast television and cable television . . . the two main delivery systems by which advertisers can employ the medium for commercial purposes on a market-by-market basis.

* * * *

BROADCAST TV IS VIRTUALLY EVERYWHERE

Television is ubiquitous . . . with coverage of more than 98% of U.S. households.

Basically the medium is mature, in terms of household penetration . . . having achieved 95% coverage twenty years ago.

However, with each passing year, more U.S. households join the television universe. In the decade of the 1980s, for example, total TV homes will have increased by more than 18% from 76,300,000 in 1980 to an estimated 90,400,000. In the 1990s this trend will continue . . . with an estimated 95,400,000 households available in the television universe by 1994.

Table IV
U.S. TV HOUSEHOLD PENETRATION

Year	Total U.S. Households	TV Households	Index 1980 = 100	TV HHs as a % of Total HHs
1980	77,900,000	76,300,000	100	97.9
1984	85,430,000	83,800,000	110	98.1
1985	86,530,000	84,900,000	111	98.1
1986	87,590,000	85,900,000	113	98.1
1987	89,130,000	87,400,000	115	98.1
1988	90,270,000	88,600,000	116	98.2
1989	92,030,000	90,400,000	118	98.2

—U.S. CENSUS BUREAU.
A. C. NIELSEN (TV Households, NTI, Jan. each year).

This growth signals basic consumer interest in television that is not reflected in penetration data for other media. For example, in the 1980s, total average daily newspaper circulation was basically static . . . increasing from 62,202,000 in 1980 to only 62,826,000 in 1987 according to the Audit Bureau of Circulations. Thus, newspaper household coverage—on a daily basis—declined from 79.8% in 1980 to 70.5% in 1987.

So, today the television medium covers an estimated 26 million more households than do daily newspapers . . . a coverage gap that increases daily as TV penetration gradually increases and newspaper household coverage gradually decreases.

* * * *

THE AVERAGE U.S. HOUSEHOLD NOW VIEWS 8.4 TELEVISION CHANNELS IN AN AVERAGE WEEK

Increasing availability of broadcast stations and cable television channels provides a wide variety of choice for viewers . . . to the extent that the average U.S. household now watches 6.0 broadcast stations and 2.4 cable channels per week (in cable households the figures are 6.7 broadcast stations and 4.5 cable channels for a total of 11.2 channels viewed per week).

- However, broadcast television remains the dominant viewing choice in all U.S. TV households and in Cable TV households as well.
- In the average U.S. TV Household, 71% of all channels viewed are broadcast stations (although they represent only 46% of the total TV channels available).
- Even in Cable TV Households . . . where it could be assumed that wider choice was a key motivator . . . broadcast stations represent 60% of all channels viewed (although they account for only 33% of the channels available).

Table XII
STATIONS AND CHANNELS RECEIVABLE VS. VIEWED

	Total U.S.	Cable TV H'holds
Broadcast Stations		
Received	11.6	12.1
Viewed	6.0	6.7
Cable Channels		
Received	13.5	24.5
Viewed	2.4	4.5
Total Channels		
Received	25.1	36.7
Viewed	8.4	11.3

—A. C. NIELSEN (NTI), *The Television Audience*, 1988.

* * * *

WHILE BROADCAST TV IS VIRTUALLY EVERYWHERE . . . OTHER MEDIA ALTERNATIVES ARE NOT

One of the hallmarks of broadcast television as an advertising medium is its ability to deliver large audience numbers in a relatively short period of time. This "mass audience coverage" is due, in large part, to the almost total penetration of broadcast television in U.S. households . . . along with the high percentage of homes that use the medium on a daily and weekly basis.

These features are not yet shared by cable television (or the leading advertising alternatives on cable), which as yet cover just over half of the total television household universe.

They are also not shared by daily newspapers, which have relatively low penetration figures . . . especially in terms of major market circulation.

NAB/TVB SELECTED MARKET AREAS: COVERAGE OF MAJOR MEDIA ALTERNATIVES

Looking at the NAB/TVB Selected Market Areas, the following picture is revealed:

1. Broadcast TV penetration has achieved virtual household saturation in all markets.

2. In a given week, the average leading broadcast station reaches 90% of DMA households.

3. Cable household DMA penetration varies from 45% in Fort Wayne to 78% in Hartford-New Haven.

4. The leading cable network reaches, on average, 23% of DMA households each week (diary basis); in Hartford-New Haven (meter basis), USA Network reaches 40% of DMA households.

5. The number one daily newspaper, in terms of metro household coverage, performs well relative to cable in all markets. On a DMA basis, the number one newspaper also does well in the smaller markets . . . but has no apparent advantage in Tampa-St. Petersburg or Hartford-New Haven. However, in all markets, broadcast TV has a significant advantage over all media studied.

* * * *

THE WORLD OF TELEVISION—SUMMARY

- Television is the pre-eminent medium . . . and the most pervasive force in American society.
- It is ubiquitous . . . covering more than 98% of U.S. households.
- By 1994, over 95,000,000 homes will comprise the television universe.
- Consumer interest in the medium remains at an all-time high as evidenced by the density of sets within households and continued record sales of video hardware.

- By 1994, there will be over 200,000,000 TV sets available for viewing in U.S. homes.
- There are more viewing alternatives than ever . . . 25.1 channels per household . . . and the average household now views a record 8.4 TV channels in an average week.
- A major factor in the expansion of television has been cable TV which more than tripled its penetration in U.S. TV homes during the 1980s . . . to a level of 53.8% in November, 1988.
- Still, the majority of sets in the country (61.3%) continue to receive over-the-air, broadcast transmissions exclusively.
- And, even in cable television homes, where broadcast stations account for only 33% of all channels available . . . they represent 60% of all channels viewed.
- The NAB/TVB Selected Market Areas chosen for special emphasis in this study are well served by all forms of television.
- In these markets, broadcast TV is at virtual saturation in terms of household penetration coverage. Furthermore, the leading broadcast station reaches about 90% of DMA households on a weekly basis. By comparison, cable TV is available in substantially fewer homes and leading cable networks tend to reach about one-fourth of DMA households in a given week.
- Television, overall, has substantially greater household coverage and weekly circulation than daily newspapers, whose daily household coverage levels have been declining in recent years.

* * * *

II. THE BROADCAST TELEVISION AUDIENCE—DIMENSIONS OF LEADERSHIP AND DIVERSITY: INTRODUCTION

Looking at the industry trade press over the past five years, one is struck by the strong editorial focus that is accorded the "arrival," "growth," and "coming of age" of cable television.

There is no question that cable has provided a stimulus to the television industry: as a competitor to broadcast TV; and as a source of diversified programming choice for the viewing public. Because cable is waging a developmental, uphill battle it has had to be very resourceful, especially with respect to its commitment to marketing.

The cable marketing story has been finely tuned . . . to recruit and retain subscribers; to convince advertisers and their media buying agents of its value as an advertising vehicle; and to lobby the industry trade press about its achievements and progress.

But in the process some basic truths about the television audience have become obscured. The focus on the issue of "erosion" is a negative that is detrimental to television. It suggests that television viewing is on the decline. In fact this is not the case: In 1988, aggregate hours of household viewing per day reached a record high . . . over 624 million hours.

True, there has been a gradual shifting of audience loyalties. Inevitably, as viewers have exercised their option to choose from the growing number of alternatives available, the audience viewing cable television programming has increased. However, as the television universe is presently constituted, a review of data from the NAB/TVB Selected Market Areas indicates that broadcast television continues to hold some powerful advantages:

- Broadcast TV is the only means of rapidly delivering large blocs of consumers who can be reached in a variety of program environments suited to achieving maximum involvement and impact.
- The vast majority of viewing in cable households is to broadcast channels.
- Despite many reports to the contrary, local broadcast TV's demographic quality is equal to that of leading cable channels . . . and provides substantially larger numbers of upscale marketing targets.
- Although much as been written about news and sports "narrowcasting" on cable, the vast majority of local news and sports viewing is to local broadcast stations.
- On a cost per gross rating point basis, local broadcast TV tends to be substantially more efficient as an advertising buy than local cable or daily newspaper alternatives.

* * * *

VIEWERS IN CABLE TV HOUSEHOLDS STILL PREDOMINANTLY WATCH BROADCAST CHANNELS

Earlier in this report, it was noted that, in cable TV households, broadcast stations represented only 33% of the channels available, but accounted for 60% of all channels viewed.

A similar pattern holds true when aggregate commercial television audiences are examined.

Broadcast television's share of total viewing to all commercial television retains an approximate 2:1 advantage over cable channels . . . even in basic cable and pay television households.

Table XXVII
BROADCAST VIEWING SHARE IN
CABLE HOUSEHOLDS

COMMERCIAL TELEVISION: 100% SHARE BASIS

	Basic Cable Households	Pay Cable Households
All Day		
Broadcast	66.9%	65.8%
Basic Cable *	33.1	34.2
Early Fringe		
Broadcast	69.4%	67.5%
Basic Cable *	30.6	32.5
Prime Time		
Broadcast	71.2%	71.5
Basic Cable *	28.8	28.5

—A. C. NIELSEN (NTI), CABLE TV STATUS REPORT, Nov. 1988.

* Broadcast excludes PBS; Cable includes Superstations.

* * * *

AT THE LOCAL MARKET LEVEL, BROADCAST TV REMAINS THE MOST EFFICIENT BUY AMONG THE ALTERNATIVES ANALYZED

If there are two worlds of television today, they are the national and the local . . . each of which present different competitive market structures with respect to broadcast and cable TV.

At the national level, cable TV provides a conveniently packaged adjunct to the broadcast networks. It delivers national coverage (with very low audience levels) at cost per thousand levels which, in prime time, are more efficient than broadcast network TV (*Media Matters*, June, 1988).

Locally, however, cable is a fragmented, unwieldy buy . . . and particularly in the larger markets analyzed in this study . . . a less efficient buy.

In four of the markets singled out for in-depth analysis, broadcast TV is more efficient than cable TV. The exception is Tulsa, where cable TV is more efficient in prime time and about equal to local broadcast costs per point when compared to the average for early fringe/early news/access/late news/late night.

Broadcast has a substantial efficiency advantage over daily newspapers even on a metro basis in all markets analyzed . . . except Hartford-New Haven. Cable TV is also more efficient than daily newspapers in Tulsa and about even in Eugene.

In the larger markets analyzed, cable bases its pricing structure on a "cost per thousand subscribers basis" which, when converted to cost per DMA rating point delivers results at substantially higher costs per rating point vs. broadcast TV.

At the local market level, then, it is not necessarily more efficient to augment broadcast TV with cable. Tulsa might be an exception, though reach/frequency analyses would have to be undertaken to determine its precise media value as an addition to local broadcast.

From these data two points are clear: (1) in most cases, local cable is a highly inefficient buy; and (2) the relative efficiency of broadcast and cable TV must be worked out on a case-by-case basis as there is substantial variance across markets.

* * * *

THE TELEVISION AUDIENCE—SUMMARY

• Recently, the industry trade press has been obsessed with reporting the "arrival," "growth," and "coming of age" of cable television.

• Editorial focus on the gains made by cable (which are salutary) and the consequent "erosion" of broadcast television audiences have cast a pall of negative comment across the TV medium. It suggests that the medium is on the decline . . . which it is not.

• Total household viewing is back on the upswing (after the shift to People Meter measurement) and total daily hours of household viewing, nationwide, is at an all-time high.

• A powerful stimulus is cable, where the average cable TV household views about 16% more TV than non-cable households and where simultaneous viewing to two or more sets at the same time is on the rise.

• An analysis of commercial TV viewing documents that cable TV has, indeed, increased its share of total viewing . . . by only 7% since 1984. The same picture holds true in five NAB/TVB Selected Market Areas chosen for special analysis in this study . . . although the rate of change varies and is not as pronounced in some market situations.

• Concern with the perceived weakness, or decline, of broadcast television has obscured the fact that broadcast television is still the dominant form of TV . . . by a significant margin. In fact, even in cable TV households, about two-thirds of the viewing is to broadcast TV.

• A detailed review of custom audience tabulations from the five NAB/TVB Selected Market Areas has found that broadcast audience indices are relatively equal to those of cable TV in terms of socio-economic selectivity; that the lion's share of news and sports viewing continues to be allocated to broadcast TV; and that—on the local market level—broadcast TV is the most efficient means of delivering commercial audiences . . . compared to cable TV and daily newspapers.

* * * *

III. THE EVOLVING TELEVISION ADVERTISING MARKETPLACE: INTRODUCTION

Since cable television began to develop broad-based means of advertiser support, early in the 1980s, a major transformation of the television advertising marketplace has been taking place.

The injection of major new competition has caused many clients to re-evaluate their deployment of television advertising funds.

Marketplace pressures have led to new strategies for using the TV medium which have drawn out several clearly defined trends:

1. National cable network advertising is now being increasingly used as a supplement to broadcast network television purchases.

2. Broadcast network's share of total revenues are on the decline . . . as high unit costs and declining audience shares are limiting the efficiency of the medium.

3. Barter/syndication is also being effectively employed as a lower cost means of achieving wide television exposure across markets.

What about the local broadcast television marketplace in this changing environment?

It would appear, from the analyses undertaken, that the situation has never been healthier. Local broadcast TV advertising is at an all-time high and is expected to increase its volume and share over the next five years.

Furthermore, while cable television has made some degree of national impact as an advertising medium, its local advertising potentials remain in a very primitive and developmental stage in most local markets.

Only 69% of cable TV households can receive locally inserted advertising via cable channels. Cable intercon-

nects are still in an early stage of their development and local cable originated programming—of any true measure of audience appeal—is virtually non-existent.

This section of the study provides an update on television in transition at the local market level . . . and finds that the more things have changed . . . the more they've stayed the same in Hometown U.S.A.

BROADCAST ADVERTISING ADVANCES TO RECORD HIGHS

In 1980, television advertising amounted to an estimated $11.5 billion. By the end of the 1980s, it is projected that total TV ad volume will have increased by nearly one and a half times to a record level of $26.9 billion.

During the 1980-1984 period, television advertising volume registered double-digit growth, continuing a trend that had been well established from the early days of commercial TV. In fact, since records were compiled, TV has experienced only one year (1971) when advertising volume was below that of the year prior. It should be noted that this was a highly atypical year, indeed, as ad volume was influenced by (a) a deep economic recession; (b) the removal of cigarette advertising from TV: and (c) the proliferation of 30-second commercials.

This is a record of unparalleled success among the various advertising media.

Since 1984, the year-to-year rate of growth has slowed . . . to 7% per year . . . partly due to intensified competition for advertiser funds from competing media and promotion sources; also, due to the fact that unit costs for television advertising rose much faster than the rate of inflation during this period (a condition that forced many advertisers to put a ceiling on budget increases allocated to the medium).

Despite this gradual slowing of growth, television ad volume advanced more than $15 billion during the decade

of the 1980s . . . establishing all-time annual records for each year in the process.

Table XXXVIII
TELEVISION ADVERTISING VOLUME
(Broadcast, Cable and National Syndication TV)
1984-1989

Index Year	Millions of $	1984 = 100
1984	19,848	100
1985	21,022	106
1986	22,881	115
1987	23,904	120
1988	25,712	130
1989E	26,945	136

—McCANN-ERICKSON; TVB.
E estimated.

* * * *

LOCAL CABLE ADVERTISING HAS BEEN SLOW TO DEVELOP

In 1984, advertiser investments in local cable represented an estimated $80 million. By 1988, this figure had increased to $250 million . . . and accounted for just over 20% of all advertising investments placed in cable TV.

A good deal has been made about the rapid growth of local advertising in cable TV . . . and the tremendous emphasis that local operators are now placing on the development of advertiser support. Certainly, much is being done and great strides will be made in local cable advertising over the next decade. However, the situation is hardly that characterized by one leading trade journal as the "cable TV tortoise overtaking the over-the-air hare."

To put the picture in perspective, local cable TV ad volume . . . from all sources . . . on all systems that carry

local advertising . . . was estimated, in 1988, to represent $110 million *less* than local ad revenues placed on broadcast stations in the five markets that have been chosen for detailed analysis in this study and which account for less than 5% of U.S. TV households.

Table XLII
LOCAL ADVERTISING REVENUES—1988
(Millions of $)

ALL LOCAL CABLE AD DOLLARS	$250
ESTIMATED AD REVENUES: NAB/TVB SELECTED MARKET AREAS	
Tampa-St. Petersburg	$157
Hartford-New Haven	125
Tulsa	40
Fort Wayne	23
Eugene	15
TOTAL: FIVE MARKETS	$360

—NATIONAL ASSOCIATION OF BROADCASTERS/ BROADCAST INVESTMENT ANALYSTS, INC., *INVESTING IN TELEVISION, 1988.*

Locally, cable television advertising has lagged . . . and will continue to lag behind the medium's national growth . . . for some very logical reasons:

1. Not all local systems carry advertising. It was seen that, as of 1988, 69.2% of cable TV households are currently counted as "cable ad homes." In Tampa-St. Petersburg, the figure is 90%, Hartford-New Haven, 71%, Tulsa, 59%; in Fort Wayne, 54% and Eugene, 42%. (Table XLIII, next page)

2. All local systems do not carry all ad-supported networks into which local spots are inserted.

3. Each TV coverage area is covered by a number of systems: for example, there are more than 175 cable systems serving the five selected markets explored in this study.

4. Cable TV interconnects are in the early stages of their development and do not yet provide coverage of all market areas.

5. Not all interconnects are "hard" interconnects which afford "real time" insertion of advertising messages system wide. The alternatives present a bewildering situation which require extensive duplication of video materials and challenge media buyers who seek to monitor fulfillment of their advertising orders.

6. Cable networks do not always achieve reportable audience levels in local market rating reports and, thus, do not provide documentation of audiences to specific programs and time periods.

7. It was seen earlier in this report that cable audience efficiencies, as measured by costs per rating point, tend to be higher than those for local broadcast. Many cable marketers skirt this issue by selling on the basis of cost per thousand subscriber households . . . a figure that has no real meaning in terms of audience delivered.

* * * *

A CANDID APPRAISAL OF LOCAL CABLE ADVERTISING

Where does local cable advertising stand at present and to what degree is it a threat to local broadcasters? When one cuts through all the mountains of print that have been generated by the trade press, what facts stand out?

Norman Hecht Research executive interviewers contacted over 20 senior advertising, media and marketing executives . . . at the national level and in the local markets under study . . . to seek their assessment of local cable television as an advertising medium. These senior level contacts were drawn from major national advertising

agencies and media buying services; also from local advertising agencies and advertisers in the selected markets. They were interviewed on a confidential basis and with the agreement that quotes not be attributed to them by name to assure absolute candor in their replies.

In addition, 13 senior level broadcast executives were also interviewed on a confidential basis to obtain their appraisal of the local cable advertising situation. An overview of their replies is presented below.

THE AGENCY/ADVERTISER VIEW

Generally speaking, top industry buying influences have adjusted to the new world of television. Cable is now perceived as an integral part of their media planning systems. However, it is most often viewed as a supplemental medium . . . employed to provide additional frequency to broadcast schedules . . . and used mostly on a national basis.

Local cable is another situation entirely. Many leading media executives contacted said that their firms did not buy any local cable . . . or else bought it sparingly (and usually at the insistence of clients who have unique local or dealer support requirements).

> "(we buy cable) mostly on network . . . one or two clients use interconnects" (New York agency media executive)
>
> "We'll look at local cable opportunities . . . but don't buy much of it . . . it (local cable advertising) is not developed yet . . . it's a few years away." (Major agency media director)
>
> "We buy local cable under duress . . ." (Major agency media executive)
>
> "Local (cable) isn't efficient . . ." (New York agency media executive)

They express concern over the complexities that are presented by local cable systems and by the unwieldy nature of the evaluation, buying and media management process.

> ". . . you've got to look system by system . . ." (NYC agency media research executive)

They do not believe that local, cable-originated programming is having any measurable impact on the marketplace.

> "Don't know of any local program offered by a local cable company." (Fort Wayne agency executive)
>
> "There is a local access channel that is not promoted well and few people know about it." (Tampa agency president)
>
> ". . . I haven't seen local cable do a lot of anything." (New York media buying service executive)

They call for more cable audience measurement and want more numbers as concrete proof of what the cable television medium is delivering on a local market basis.

> "Cable doesn't really get numbers locally . . ." (New York agency media executive)
>
> "There is no data to work with . . ." (Fort Wayne agency executive)
>
> "The ratings data they provide . . . are based on national ratings extrapolated to the local level." (Tulsa Media Director)

There is agreement that cable is acting as a stimulus to more productive media negotiations and that, in the long run, broadcast television . . . and the television medium overall . . . will be a stronger, more effective advertising tool as a result.

* * * *

THE EVOLVING TELEVISION ADVERTISING MARKETPLACE—SUMMARY

• The development of cable television as an advertising force has been a stimulus for change in the television advertising marketplace.

• With increased competition and more avenues by which to employ the medium, total television advertising volume is forecast to reach a record high of $26.9 billion in 1989.

• Changing audience/cost ratios have led to marketplace changes in the distribution of broadcast advertising monies . . . with the result that local broadcast advertising, barter/syndication and cable advertising are now increasing their share of total dollars; network share is declining and national spot share, while holding even in the 1984-1988 period, is expected to decline somewhat in the next five years.

• Despite these charges, every segment of television advertising is expected to reach all-time revenue peaks in 1989.

• The 1980s have witnessed tremendous double-digit growth for cable TV which signal growing respectability for that component of the TV advertising marketplace.

• Still, national cable TV advertising substanially outweighs local cable spending.

• Put in true perspective, local cable advertising is available to only 44% of U.S. TV households and represents total dollar volume of $250 million that is considerably less than the $360 million in local broadcast advertising revenues generated in the NAB/TVB Selected Market Areas chosen for detailed analysis in this study.

• Top media experts believe that local cable advertising has to make some significant strides before it can be counted as a major competitor to local broadcast. These include: development of more "hard" interconnects and

resolution of the unwieldy nature of local cable buying; provision of more authenticated audience ratings data; creation of attractive local cable programming vehicles; and, more mature pricing strategy . . . based on audience values and providing more competitive media efficiencies.

• Broadcast executives from the markets receiving attention in this study appear to be realistic . . . neither underestimating cable . . . nor standing pat with respect to their marketing response.

• In this evolving competitive climate, Norman Hecht Research presented a value analysis of broadcast and cable advertising criteria which suggests that broadcast still retains powerful advantages over cable in the local TV marketplace that will not be easily overcome in the near term.

IV. A MATURE MARKET . . . WHAT IT MEANS FOR BROADCASTERS

There are some analysts who look at the broadcast business today and conclude that the medium is in a slump. They point to lower growth rates, to the moderate decline in audience shares and to the inroads made by cable television. There are even some broadcasters who bemoan the present situation and look back upon the old times as better times. True, the old times were somewhat better . . . but that does not change the fact that the current times are very good, indeed, and that the continued strong performance of today's local broadcast marketplace needs to be highlighted, recognized and put into proper perspective.

Television broadcasting remains one of the outstanding growth industries in the United States. Veronis-Suhler Associates, a leading investment firm specializing in the communications-related industries, reports (*Five Year Communications Industries Forecast*, 1988) the following outlook for the next several years:

—U.S. Economy: Annual Growth Rate (1987-1992)

+7.5%	in nominal terms
+3.2%	real growth
+4.5%	inflation rate

—U.S. Communications Industries: Annual Growth Rate (1987-1992)

+10.1%	inclusive of book and newspaper publishing; radio and TV; cable TV; the recording and firm industries, etc.

—U.S. Broadcast Television Annual Growth Rate (1987-1992)

+11.5%	total broadcast advertising volume
+13.9%	local/retail broadcast advertising

This is hardly the picture of an industry in trouble. It is true, in the past ten years, the broadcast television business has gently eased into that stage of the product life cycle which is known as "maturity." There has been a lot of talk about this condition, but exactly what does it mean? What are the characteristics of a mature market cycle and what implications do they hold for broadcasters?

The key features of the mature market stage are these:

1. Its length. Mature market conditions are usually those which last the longest for any product or concept. So, this condition is not transitory. It will prevail for a long, long time. Therefore, it is important to understand how to cope.

2. Its predictability. Major market competitors are well entrenched . . . marketing policies and "brand" images are well known . . . customer loyalties and market shares are relatively stable. Forecasters rarely find themselves "out on a limb" as the rate of change in market dynamics has lessened. Certainly, these aspects of the market are true for TV broadcasting.

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS CITED IN TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MEMORANDUM OF LAW IN OPPOSITION TO DEFENDANTS' AND INTERVENORS' SUMMARY JUDGMENT MOTIONS AND IN FURTHER SUPPORT OF ITS SUMMARY JUDGMENT MOTION VOLUME I, TABS 1-20

* * * *

June 16, 1995

[Exhibit 20]

[NAB Logo]

Research & Planning Memorandum

To: Jeff Bauman, Ben Ivins, Mark Fratrik

From: Rick Ducey

Re: Cable Drops and Repositions Survey

Date: January 30, 1990

INTV SURVEY: I spoke with Sue Rynn in New York and Jim Popham in Washington to get the latest on INTV's "Cable Channel Shifting Survey." The deadline for responding to this survey is today. Jim mentioned that they have about 30 responses in.

The responses are probably not all that helpful. Many stations would not have qualified under the old must carry rules, had poor information and documentation and tended to be smaller stations denied carriage. Sue did note that syndex was playing an apparent role in some of the drops. She said they will probably extend their deadline.

Jim characterized the responses as showing mostly repositioning problems, some drops and some denied carriage. He said the Melbourne, Florida market has the best horror story to tell. INTV will be doing some follow-up to see if they can get anything useful out of their survey. Jim promised to get a survey report to me by the end of the week.

NAB SURVEY: For the NAB survey of cable drops, denied carriage, repositions and carriage for consideration, I am attaching a proposed questionnaire, based on the FCC's April 1988 questionnaire. I propose we re-

think our strategy given INTV's experience. First, we should probably do just affiliates, since they have already done an attempted census of independent stations (not just INTV members). Also, since independents are likely to be harder hit than affiliates, we should not expect to get a lot of good examples of cable operators' abuses when we do this survey.

If we decide to do the survey, it can be fielded quickly. We will fax the questionnaire and set up a 800 telephone number for stations to respond to. If we get insufficient response, we can call out to them, but since the questions require stations to do some work, it will take several calls to get what we need out of each station.

My questions for you: (1) do we still want do the survey; (2) should we do just affiliates; and (3) I need your comments ASAP so we can put this into the field.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS CITED IN TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MEMORANDUM OF LAW IN OPPOSITION TO DEFENDANTS' AND INTERVENORS' SUMMARY JUDGMENT MOTIONS AND IN FURTHER SUPPORT OF ITS SUMMARY JUDGMENT MOTION
VOLUME I, TABS 1-20

* * * *

June 16, 1995

[Exhibit 17]

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

BC Docket No. 82-345

In the Matter of

Amendment of 47 C.F.R. § 73.658(j)(1)(i) and (ii), the Syndication and Financial Interest Rules

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To: The Commission

COMMENTS IN SUPPORT OF FOX BROADCASTING COMPANY'S "PETITION FOR RESUMPTION OF RULEMAKING AND REQUEST FOR TEMPORARY RELIEF"

NATIONAL ECONOMIC RESEARCH
ASSOCIATES, INC.

National Economic Research Associates, Inc.
1800 M Street, N.W.
Washington, D.C. 20036
Telephone: (202) 466-3510

March 5, 1990

* * * *

C. *Growth of Independent Television*

The number of independent television stations nearly tripled between 1980 and 1989, growing from 115 to 339, a 195 percent increase.[22] During this same period, the average household viewing audience of independents increased. Between November 1987 and November 1988, for example, independents gained an average of 133,000 households in total dayparts, and an average of 639,000 households in prime time.[23] Aided by the growth of cable which has helped to offset some of their technical disadvantages and by the proliferation of TV sets with all-channel capability, many independent stations have established themselves as economically viable program outlets.

* * * *

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[22] Figures provided by the Association of Independent Television Stations, Inc., 1990.

[23] Cablevision Advertising Bureau, Inc. *Cable TV Facts '89*, New York 1989, p. 18.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME I

* * * *

May 26, 1995

[Exhibit 12]

ADERTISING REVENUES

PER TELEVISION HOUSEHOLD:

A Market by Market Analysis

1991 Edition

[NAB Logo]

* * * *

Five-Year Trend

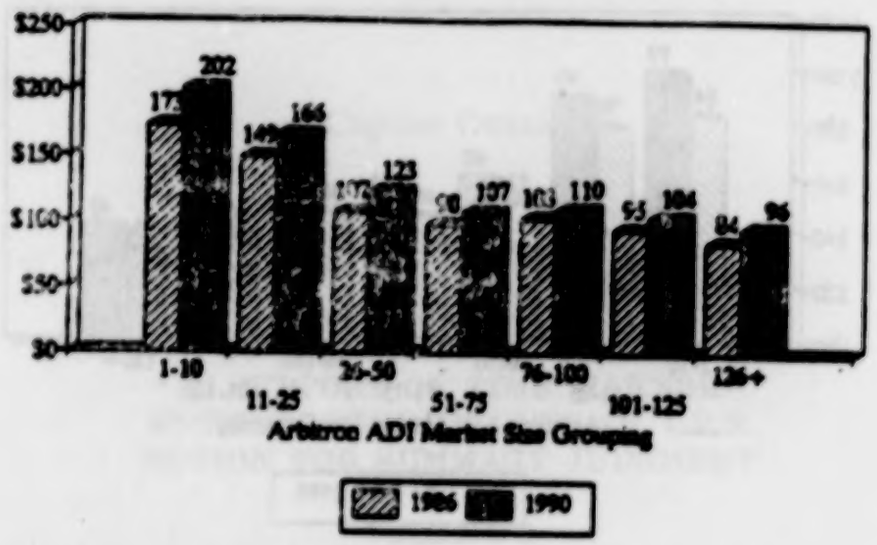
Total Time Sales

Since 1986 the television industry has seen a 20.6% increase in total advertising revenues.[5] For advertising revenues received by stations, national spot advertising rose 20.3% and local advertising increased 20.9%.[6] While these are healthy increases, they are lower than the previous five-year period (1982-1986) where national spot increased 50.5% and local advertising increased 73.0%.[7]

When examined on a per television household basis, the television industry is still showing increased revenues for their existing product, television households. Of the markets examined total time sales per television household increased 10.0%, national/regional advertising 11.8%, and local advertising, 11.5%. These increases are in addition to any increased revenues resulting from growth in the size of the markets (i.e., growth in television households).

The growth in total time sales per television household was generally the same for the different market groupings. The largest markets, ADIs 1-10, saw the most significant growth, 16.8% followed by ADIs 26-50, 15%. Third in growth were the smallest markets, ADIs 126+, which saw a 14.3% increase in total time sales per television household. All others experienced growth of only a few percentage points different from the national average (10.0%). Figure 4 shows the average values for total time sales in 1986 and 1990.

Figure 4
Total Time Sales per TVHH, 1986-1990
By Market Grouping

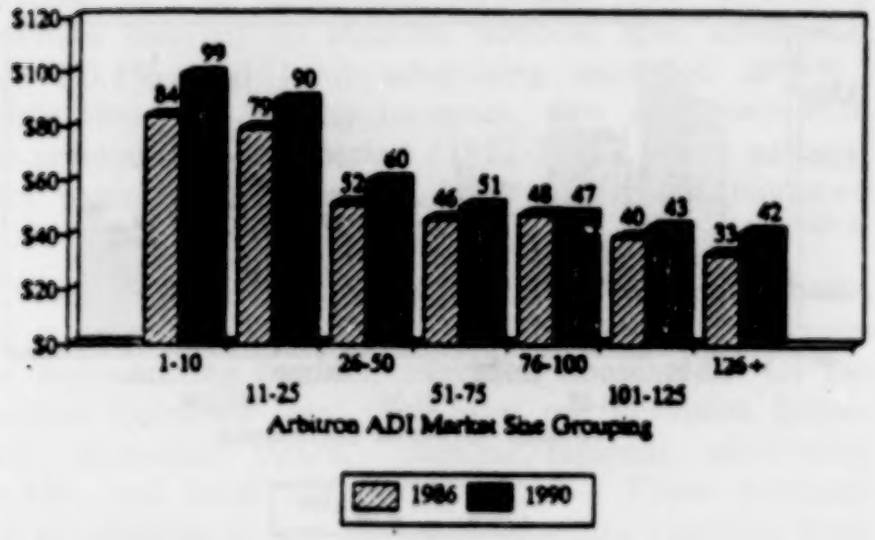


National/Regional Advertising

As for national/regional advertising, the average increase across all markets was 11.8%. The top three market groupings, ADIs 1-10, 11-25, and 26-50, as well as ADIs 126+, showed increases greater than the overall average. Indeed, the smallest markets, ADI size 126+, experienced the largest growth, 27.3%. While the largest markets, ADIs 1-10, experienced a 17.9% increase in national/regional advertising on a television household basis. Figure 5 shows the 1986 and 1990 values for the market size groupings.

BEST AVAILABLE COPY

Figure 5
National/Regional Advertising per TVHH, 1986-1990
By Market Grouping



Local Advertising

On the other hand, local advertising growth showed stronger growth across more market sizes. The average across all markets for local advertising per television household was 11.5%. The mid-sized markets of ADIs 26-50 saw the largest gain, 16.3%, followed by ADIs 101-125 (12.5%) and the top ten markets (14.9%). Figure 6 shows the 1986 and 1990 values for local advertising on a television household basis.

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME I

* * * *

May 26, 1995

[Exhibit 13]

Economics may have been biggest topic of discussion at convention, despite association's new emphasis on lobbying. "The bottom fell out" of ad market in 4th quarter after elections, TvB Pres. James Joyella said, and there's no sign yet of resurgence. As result, "the economy is bringing the independents back together" after period of internal division on such issues as finsyn, said former INTV Pres. Robert Wormington of KSHB-TV Kansas City. "We're finding that there are more important things keeping us together than were pushing us apart," he said.

Economy contributed to cutting attendance at convention to around 850 from 1,350 year ago. Same effect is being seen elsewhere, with TvB membership down from about 500 stations 2 years ago to current 425, Joyella said. Economic problems of broadcasters were highlighted last week when Jacor was forced to restructure debt because of ad sales drop. Joyella said ad sales "stopped like they hit a wall" after Nov. elections. INTV Chmn. Randall Smith, WPHL-TV Philadelphia, said national spot market was "severely disrupted," particularly when networks dropped rates. Part of problem, he said, is that there were "too many hogs at the trough"—reference to expansion of network ad inventory, gains in cable ad sales, growth of other competing media.

Broadcasters "have got to stop selling against each other" and start selling aginst nonbroadcast media, Joyella told closed-door general managers' breakfast Jan. 4. He also pushed for more independent station participation in TvB, saying there's "misperception" that TvB treats network affiliates better than independents: "All stations sit at the same table at TvB." Joyella cited what he called big breakthrough for group Jan. 3 when large non-Fox independent KTLA L.A. joined for first time.

There's no sign of immediate resurgence in ad sales in first quarter, Joyella said, and it probably will be

impossible to get good reading on full-year sales until at least 2nd quarter because first traditionally is weak and "flukey." Fall-off in ad sales was "tremendously uneven geographically," Joyella told us: "The Northwest doesn't know anything about a recession while Boston stations are jumping off the roof." But he said there has been no apparent difference between independent stations and affiliates.

Despite "some concern" about 1991, independents "are the stations to own in the 1990s," Smith said. Independents made "significant inroads" on network affiliates' dominance in 1980s, said Thomas Buono, pres. of Best. Investment Analysts. He said independents' revenues grew average of 14% per year during decade, vs. 8% for affiliates. Individual stations, however, may not have done as well because much of industry's revenue increase was result of increase in number of independent stations to 330 from 115 in 1980. Buono predicted revenue growth would slow to 6% in 1991, then average about 7% per year through rest of decade.

Independent stations did well financially in 1990, despite recession in last quarter, Hedlund contended in his opening address. Stations "held their own" in fact of increased cable competition and in total-day audience share, and gained full point of audience share in prime time, he said. "The basic fundamentals of independent television are stronger than they have ever been," he said, and independents are poised to recover from recession "far sooner" than other media.

Nevertheless, stations must adapt to changing demographics, according to Jan. 4 lunch speaker Joseph Cappo, publisher of Ad Age. Declining birthrate and changing life-styles mean audiences will be smaller, older and watch less TV, he said. In addition, audiences will be less affluent because earnings won't outpace inflation, and will include much higher percentage of immigrants (for example,

he said, Hispanics will outnumber African-Americans in U.S. by end of decade).

Must-carry and telco entry will be top priorities of INTV in 1991, with association committed to achieving first and keeping out latter, officials said in opening-day speeches. Hedlund said association will even have to consider trying to achieve "truce" with cable as way to keep out telcos, whose entry he said "would quickly put an end to us and the cable industry." He named several other issues for increased lobbying emphasis: (1) "INTV will take no prisoners in defending the prime-time access rule at the FCC and, if necessary, all the way to the Supreme Court of the United States." (2) Defending independents against "unparalleled greed" of sports leagues. (3) Protecting stations against "neo-Prohibitionists [who want to] limit or eliminate beer and wine advertising." (4) Protecting spectrum to assure independents will be able to get channels for HDTV.

Telco entry bill from Sen. Burns (R-Mont.) will take new form this year, said Donald McClellan, key aide to senator, who sponsored key telco entry bill in Senate last year. "Substantially revised version" will deal with barriers to cable entry into telephone services, as well as telco entry into cable, he told opening-day breakfast. Result will be "dramatically different dynamics," he told us later, affecting bill's chances, with some cable operators interested in providing Personal Communications Network (PCN) telco services likely

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.M

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 288]

OPP Working Paper Series

26 Broadcast Television in a Multichannel Marketplace

June 1991

Florence Setzer
Jonathan Levy

* * * *

Industry observers believe that the growth of cable made possible the expansion in the number of broadcast television stations by increasing the potential audiences of UHF stations.[18] Cable carriage of over-the-air signals reduces the disadvantage of UHF relative to VHF stations by increasing UHF stations' geographical reach and improving their reception quality. Channel positioning also appears important to the success of broadcast stations, and cable systems can give UHF stations desirable low channel positions. Satellite delivery of syndicated programming may also have encouraged the growth in numbers of television stations by making program distribution more flexible and efficient and less expensive.

* * * *

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[18] For a discussion of the disadvantages under which UHF television stations operate, see UHF Comparability Task Force, *Comparability for UHF Television: Final Report*, FCC, Office of Plans and Policy, September 1980, pp. IV-XXVIII.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME I

* * * *

May 26, 1995

[Exhibit 14]

[NAB Logo]

Research & Planning Memorandum

TO: Jim May, Jeff Baumann, John Abel, Rick Ducey, Chuck Sherman, Steve Jacobs, Dan Phythyon, Jack Goodman, Ben Ivins

FROM: Mark Fratrik

RE: Results From Television Financial Survey

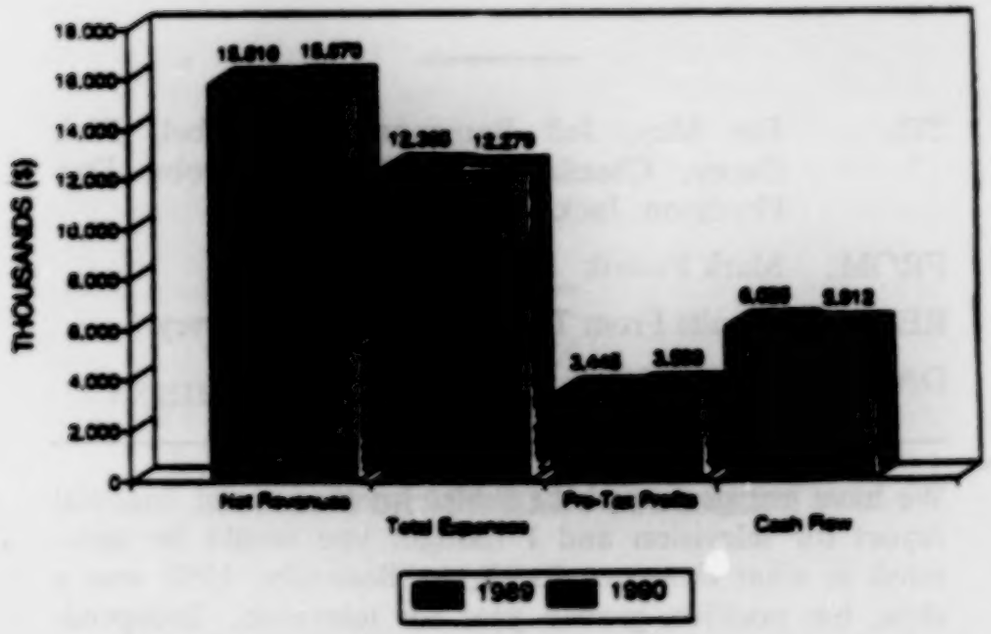
DATE: July 19, 1991

We have just generated the tables for the annual financial report for television and I thought you would be interested in what those results show. Basically, 1990 was a slow, but positive, growth year for television. Independents grew at a faster rate than affiliates, probably due in large amount to the Fox network. It is important to note that still more than half of the independent stations lost over $411 thousand in 1990. The tables below show the 1989 and 1990 values for revenues, expenses, profits and cash flow for the average affiliate and independent station for the two years.

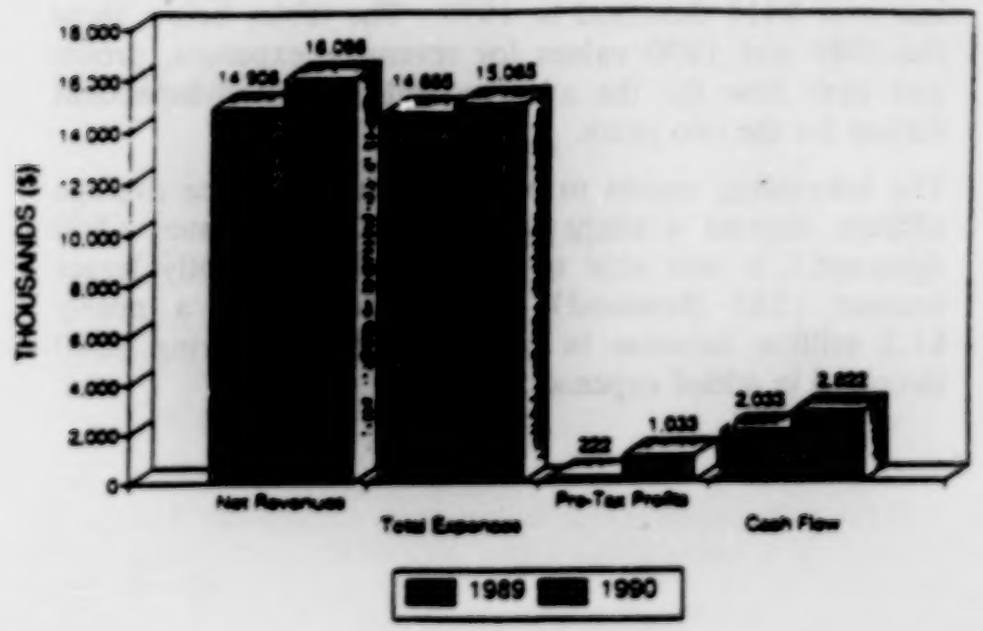
The interesting results to notice is that while the average affiliate showed a slight increase in net revenues ($60 thousand), it was able to cut costs by a slightly larger amount ($85 thousand). Independents saw a nearly $1.2 million increase in revenues while incurring $380 thousand in added expenses.

* * * *

AVERAGE AFFILIATE - 1989 VS. 1990

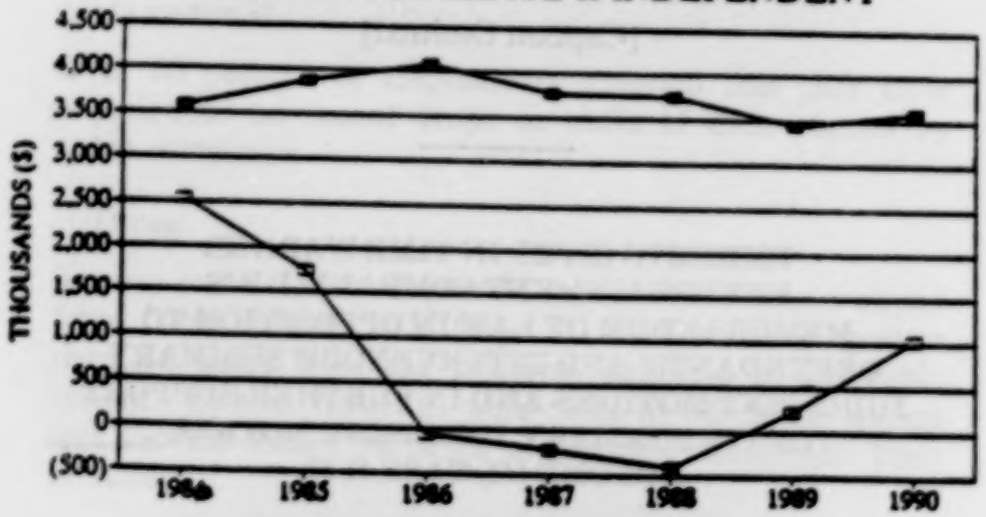


AVERAGE INDEPENDENT - 1989 VS. 1990



This slight increase in affiliate profits and more noticeable increase in independent profits follows the trend of the most recent years as shown in the last graph.

PRE-TAX PROFITS, 1984-1990
AVERAGE AFFILIATE & INDEPENDENT



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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS CITED IN TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MEMORANDUM OF LAW IN OPPOSITION TO DEFENDANTS' AND INTERVENORS' SUMMARY JUDGMENT MOTIONS AND IN FURTHER SUPPORT OF ITS SUMMARY JUDGMENT MOTION VOLUME III, TABS 41-52

* * * *

June 16, 1995

[Exhibit 42]

AMERICA'S PUBLIC TELEVISION STATIONS
HARM TO PTV STATIONS FROM CABLE SYSTEM SHIFTS AND DROPS
August 1991

* * * *

How many stations have suffered shifts or drops by cable systems?

Over 60 percent of respondents reported that they have experienced no recent drops or shifts of their station by cable companies.

Drops

Twenty-seven stations report 31 instances of being dropped from cable systems. Of these, 11 stations were greater than 50 miles from the principal headend of the cable system. Twelve, however, were cases in which the station was located within 50 miles of the cable headend. They include:

- Viewers in Hernando, Mississippi found that they no longer had access to WKNO, Memphis on Star Cable system in May 1991. The cable system replaced WKNO with Mississippi ETV, another public television service, but not the service to which viewers had become accustomed.
- Although Jasper, Indiana households can receive WNIN, Evansville on their TCI cable system, they no longer have access to the educational programming provided by WVUT, Vincennes, which was dropped from the system in June 1991.
- In 1988 and 1989, Greater New England Cablevision rebuilt its cable system. This resulted in Connecticut Public Television being dropped from the system in East Lawn Meadow, Massachusetts. Eighteen percent of Connecticut Public Televi-

sion's primetime audience had been from Massachusetts households. Viewers were deprived of a unique programming source, as the network is careful not to duplicate programming of other available public television services.

- When National Cable dropped WPBT, Miami from a number of its systems in October 1990, the station had to divert personnel and financial resources to fight this action.
- Four thousand viewers in Luling, Louisiana have been unable to receive college credit, GED and other literacy programs offered by Louisiana Public Broadcasting since October 1990, when St. Charles Cable TV dropped LPB's service. WYES, New Orleans, still on the cable system, does not offer these educational services.
- WFYI, Indianapolis was replaced by Encore on the New Castle Cable system in New Castle, Indiana, resulting in the loss of school contact.
- Viewers in Battle Creek, Michigan can no longer watch the State Capitol coverage provided by WKAR, East Lansing, since the station was dropped from the WestMarc cable system in June 1991.
- Jones Spacelink replaced the WIPB, Muncie program service with USA Network in Bluffton, Indiana in April 1991.

Seven respondents were able to have their stations restored to cable systems after they had been dropped. Situations in which the station was located within 50 miles of the cable headend include:

- First Cablevision replaced Georgia Public Television with TNT in Peachtree City, Georgia in February 1990. Twenty thousand homes could no longer receive the service, and in-school broadcasts were terminated. Georgia Public Television

devoted a month of one full-time staffer's time as well as the time and energy of several executives, finally convincing First Cablevision to restore the service to the system.

- An aggressive member campaign and face-to-face meetings with Palm Cable resulted in WJCT, Jacksonville being put back on the cable system after a six-week replacement with a college station.

In several cases, stations were able to avert drops proposed by cable systems. For instance:

- In April 1991, the Assistant General Manager of WTVS found out that Westmark Cable was planning to drop his station from the system in Adrian, Michigan. He called the cable system manager, who agreed to keep WTVS on the system.
- KVCR, San Bernardino learned that Southland Cablevision was planning to drop the station from its system in April 1989 and replace it with Black Entertainment Television (BET). The station asked mayors and council members from the communities that would be affected, as well as U.S. Rep. Brown, to write to the cable company. Local newspapers ran the threat as a front page story for six days. One-third of the station's schedule consists of college telecourses, so former and present telecourse students were urged to write. The cable company had not realized how important the station was to the community. It reversed its decision in the face of so much support.

Shifts

Twenty-four stations reported 38 instances in which cable operators shifted stations to new positions on cable systems.

- In June 1991, the Storer North cable system moved WLRN, Miami to a position on the Dade

County system that was separated by 13 channels from other local broadcasters on the system. Viewers turning to the old position find nostalgia and sports programming.

- With less than one week's notice, KRCB, Rohnert Park was shifted to a new position on the Multi-Vision cable system in May 1991. It was replaced by Showtime.
- Viewers in Temple Terrace, Florida were confused in March 1991 when Paragon shifted WEDU, Tampa from channel 4 to channel 2 and put JC Penney Shopping on channel 4.
- In May 1991, Palm Cable shifted WCEU, Daytona Beach to a tier that requires a converter box for reception. This means that not all viewers will be able to receive the station. It will also result in confusion for students taking telecourses.
- Jones Intercable switched the channel positions of WNIT, South Bend and a CBS affiliate, putting WNIT on channel 39. On this system, viewers must have a special converter box to receive channels higher than 35, so many viewers have effectively lost access to WNIT.
- Clarksburg Cable did not notify either WNPB, Morgantown or viewers when it shifted the station from channel 13 to channel 7 in June 1991.

Several stations were able to have their positions restored.

- KETC, St. Louis got a new TCI system manager to restore the station to its original channel in St. Charles, Missouri in January 1991 by convincing the manager that it was the "right thing to do."
- KAID, Boise was moved to a new channel in August 1990 by King Videocable. The new channel had severe interference problems which made the signal often unwatchable. After much work with the cable system manager, KAID was restored to its original position in April 1991.

Summary

Even though drops and shifts of public television stations located within 50 miles of a cable system's headend are not occurring with great frequency, over 60 percent of all public television stations (and almost three of every four survey respondents) perceive enough of a threat that they have assigned someone to monitor and promote cable carriage.

Both personnel and financial resources are required to carry out this process; these are resources that have effectively been diverted from programming and community outreach activities.

When public television stations are dropped from cable systems, viewers lose access to programming and services to which they have contributed, with tax dollars as well as membership dollars. Public television stations lose valuable financial support from viewers who can no longer receive the service, jeopardizing their financial viability.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF CONGRESSIONAL RECORD IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

VOLUME LQ.

* * * *

Dated: May 26, 1995

[Exhibit 71]

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

MM Docket No. 90-4
MM Docket No. 84-1296

In the Matter of

Reexamination of the Effective Competition Standard
for the Regulation of Cable Television
Basic Service Rates

Carriage of Television Broadcast Signals
by Cable Television Systems

TO: The Commission

COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS

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* * * *

September 25, 1991

[APPENDIX A]

A-B SWITCH AVAILABILITY AND USE

Mark R. Fratrik
Vice President/Economist
Research and Planning Department
National Association of Broadcasters
September 23, 1991
National Assoication of

[NAB Logo]

BROADCASTERS

This study was jointly sponsored by the National Association of Broadcasters and The Association of Independent Television Stations, Inc.

Introduction

Using a so-called "A-B switch" to switch signals between from cable service and over-the-air broadcast signal reception has been suggested by some as an alternative to the mandatory carriage of local signals. If a cable system did not carry a particular station, a consumer would have to switch from the cable system to the off-air signal of that station. If, however, consumers do not have antennas hooked up to the television set or do not have these switches available, then stations are dependent upon local cable system carriage to obtain access to their audience. Unhooking the cable connection and reconnecting the antenna (if one is even available) is a cumbersome process which dissuades viewers from watching the non-carried signal.

The use of A-B switches was last examined in a 1986 study by the ELRA Group.[1] In that study, they found that 10% of cable homes switched their cable set back forth between the cable and an outside antenna.[2] Of those homes which switched, only 15% (or 1.5% of all cable homes) used an A-B switch.[3] All the others homes that switched back physically disconnected and reconnected the wires or use some other method besides an A-B switch.

Since that time the FCC has advanced the use of A-B switches. In 1986, as part of the Interim Rules concerning the carriage of local broadcast signals, the FCC included a set of rules on the provision of A-B switch by local cable systems.[4] These rules included the require-

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[1] "Outdoor Antennas, Reception of Local Television Signals and Cable Television," ELRA Group, Inc., January 28, 1986, prepared for the National Association of Broadcasters and submitted as Exhibit 1, NAB's Comments in MM Docket No. 85-349, January 29, 1986.

[2] Ibid., p. 21.

[3] Ibid., p. 22.

[4] The interim rules were adopted by the FCC on November 28, 1986, and went into effect on June 10, 1987 (FCC MM Docket No.

ment that cable systems offer these switches to consumers and provide an education program to explain the need for these switches and how to use them.

This study examines the prevalence of these switches among cable households and the amount that they are used for years after the rules came into effect, during most of which time there has been no must carry rules. Several questions were added to an omnibus national survey of households conducted by Opinion Research Corporation during the period September 12 through September 15, 1991.[6] The remainder of this paper will highlight the results of the A-B switch questions.

Results

The first question of these A-B switch series asked whether the respondent subscribed to cable. Of the 1,000 weighted respondents, 59% responded that they did subscribe to cable. This result is very close to other estimates of nationwide cable penetration.[6]

85-349). The court invalidated the carriage part of these rules on December 11, 1987 but retained the A-B switch portion of these rules *Century Communications Corp. vs. FCC*, 835 F.2d 292 (D.C. Cir.), *clarified*, 837 F.2d 517 (D.C. Cir. 1987), *cert. denied*, 108 S. Ct. 2014 (1988).

[6] The full report from Opinion Research Corporation is included as Appendix 1 of this report.

[6] The May Arbitron and Nielsen estimates for cable penetration are 60.0% and 60.3%, respectively. The Arbitron Company, New York, NY and Nielsen Media Research, New York, NY.

Since the issue of A-B switches only concerns itself with cable subscribers all subsequent questions were asked only of cable subscribers or a subset thereof. To measure the penetration of A-B switches, we first asked for the number of television sets in the respondent's household that are connected to cable. Slightly more than half (55%) had only one set, another third (34%) had two sets hooked to cable, and 11% had three or more sets hooked to cable. The average number of sets hooked to cable was 1.6.

The next question asked how many of the cable connected sets are also attached to an outside or set-top antenna. One-third of cable *households* had one or more sets connected to cable and an outside or set-top antenna. When viewed as a percentage of cable connected *sets*, only 26.3% of sets were connected to cable and attached to an outside or set-top antenna.

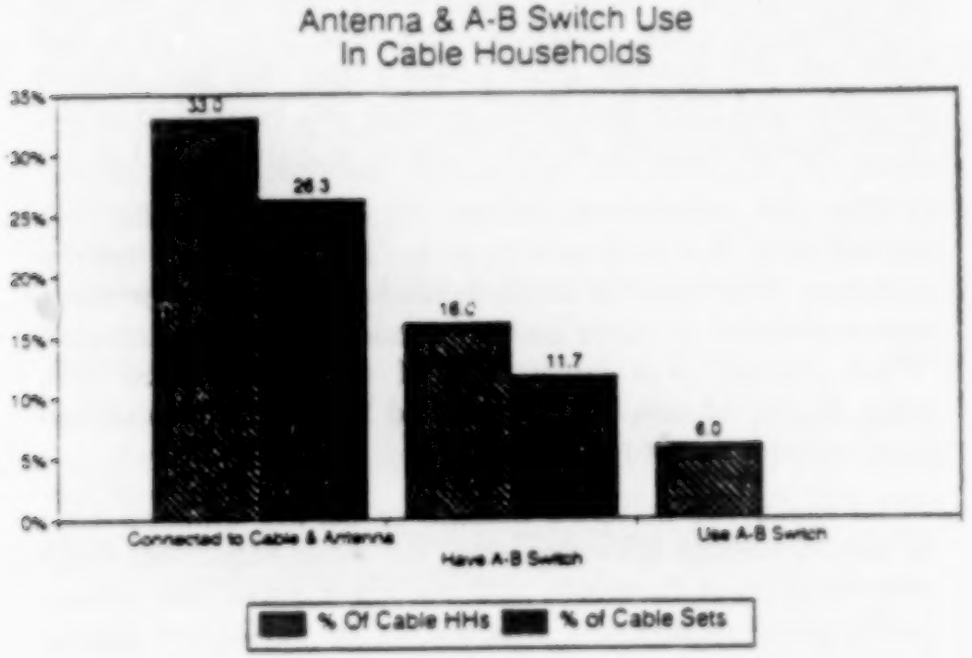
To make the attached outside or set-top antenna easy to use on cabled television sets, the cable subscriber must also have an A-B switch. Of the cable subscriber households which owned sets attached to an outside or set-top antenna, 48% have at least one of their sets equipped with an A-B switch. With respect to the number of sets, only 44.3% of the cabled *sets* attached to an outside or set-top antenna also have an A-B switch.

It is important to note that of *all cable households*, only 16% have A-B switches and are attached to an outside antenna. With respect to *all cable connected sets*, only 11.7% are attached to outside or set-top antennas and have an A-B switch.

Finally, to get a sense of how much these switches are used, we asked cable subscribers who have the switch if they ever have used that switch. Only 38% of that small group responded yes, with 58% saying no. The group that have used the switch only corresponds to 6% of all cable households.

Figure 1 below compares the results for both cable households and for sets connected to cable in those households.

[Figure 1]



Conclusion

What these results show is simply that after several years of a government mandated program of providing A-B switches consumers and a simultaneous education program on their use, there is still not a significant number of A-B switches in use in cable subscribing households. If the goal was to achieve significant penetration of A-B switches into cable households and foster significant use of these switches, this goal had not been achieved.

* * * *

* * * *

On another subject . . .

1 Do you currently subscribe to your local cable system?

1 YES —> CONTINUE

2 NO —> SKIP TO NEXT SECTION

3 DON'T KNOW/REFUSED

2 How many working television sets in your home are connected to cable?

_____

(RECORD NUMBER)

3 How many television sets are connected to cable and are attached to an outside or set-top antenna?

_____

(RECORD NUMBER)

(IF THE ANSWER IS 0, SKIP TO NEXT SECTION

4 On how many sets do you have a switch that allows you to switch back and forth between the cable and an outside or set-top antenna?

_____

(RECORD NUMBER)

(IF THE ANSWER IS 0, SKIP TO NEXT SECTION

4a Have you ever used that switch?

1 YES

2 NO

3 DON'T KNOW/REFUSED

FOR THE UNITED DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.K

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 239]

"LOCAL CABLE ADVERTISING SALES:
1992 AND BEYOND"

By: Larry Zipin
V.P. - Advertising Sales
Warner Cable Communications Inc.
(11/20/91)

I. *INTRODUCTION*

For the past ten years, many MSO's have been pioneering in the development of Local Cable Advertising Sales. The mission has been: to learn the advertising sales business; gain experience; acquire, train and develop an ad sales management, sales and operations staff; while building a revenue and NOI stream. While parts of this process are never-ending, the primary mission has been accomplished.

We enter the second decade of Ad Sales near the current edge-of-the-envelope; but, with a vision of how, and when, we can cause the envelope to expand. The refined mission should be: to bring about this expansion; by continuing to develop Cable Ad Sales roducts and Process; up to the fullest capacity of available hardware, software, and people; and thereby create a source of free cashflow that is a more significant component of the industry's future growth.

In 1991, Cable's households will generate gross advertising billings of $16/HH. If Local Cable Advertising was achieving its Fair Share of TV ad revenue, this would be $57/HH; it is also possible to conclude that this same business could be generating over $70/HH. The purpose of this narrative is to describe these possibilities, display a vision of Cable Advertising Sales' future, and discuss the issues that must be addressed to turn this vision into reality. We also need to understand how these issues relate to *both*: limitations on the current potential; and the future maximization of a new potential.

This narrative is organized by discussing each strategic issue under its own heading with related sub-headings and is accompanied by tables of detailed information to support the text.

II. *THE POTENTIAL*

Let's start by defining the universe. The advertising business is divided into three segments: *National Advertising; Local Advertising*; and the in-between segment called *Spot Market Advertising* (buying *Local* media, but as part of a cumulative Regional or cherry-picked multi-market plan). *National Advertising* is the arena for the Broadcast and Cable Network's own Advertising Sales activities. (See Tables 1 & 2.)

Table 1

NATIONAL ADVERTISING

	($ MILLION)
> BROADCAST TV NETWORK	9,690
> CABLE TV NETWORK	1,991
> BARTER TV	1,255
> RADIO NETWORK	443
> MAGAZINE	9,713
TOTAL	23,092

(SOURCE: PKA MEDIA INDEX 8/21/91)

Table 2

NATIONAL ADVERTISING
ANNUAL REVENUE PER HOUSEHOLD

(92 MILLION H.H.)	AMOUNT
> BROADCAST TV NETWORK	$105.00
> BARTER TV	$14.00
> RADIO NETWORK	$5.00
> MAGAZINE	$105.00
TOTAL	$229.00
> CABLE NETWORK *	$40.00

* (CABLE HH's: 50 MILLION H.H.)

CABLE NETWORK REVENUE/HH IS 15% OF TOTAL IN CABLE HOUSEHOLD UNIVERSE

(SOURCE: PKA MEDIA INDEX 8/21/91)

The MSO's Advertising Sales business occurs within the *Local* and *Spot Market* segments. Therefore, we are playing in an arena in which advertisers are annually spending $685 to reach each local household with their messages. (See Tables 3-6.)

Table 3

LOCAL ADVERTISING

	($ MILLION)
> NEWSPAPERS	28,414
> YELLOW PAGES	8,926
> T.V.	7,856
> RADIO	6,609
> CABLE	580
> OUTDOOR	444
TOTAL	52,829

(SOURCE: PKA MEDIA INDEX 8/21/91)

Table 4

LOCAL ADVERTISING
ANNUAL REVENUE PER HOUSEHOLD

(92 MILLION H.H.)	AMOUNT
> NEWSPAPER	$309.00
> YELLOW PAGES	$97.00
> T.V.	$85.00
> RADIO	$72.00
> OUTDOOR	$5.00
TOTAL	$568.00
> CABLE	$13.00

* (CABLE HH's: 46 MILLION H.H.)

LOCAL CABLE REVENUE/HH IS 2% OF TOTAL IN CABLE HOUSEHOLD UNIVERSE

(SOURCE: PKA MEDIA INDEX 8/21/91)

Table 5

"SPOT MARKET" ADVERTISING

	($ MILLION)
> SPOT TV	7,760
> SPOT CABLE	80
> SPOT RADIO	1,602
TOTAL	9,442

(SOURCE: PKA MEDIA INDEX 8/21/91)

Table 6

"SPOT MARKET" ADVERTISING
ANNUAL REVENUE PER HOUSEHOLD

(92 MILLION H.H.)	AMOUNT
> SPOT TV	$ 84.00
> SPOT RADIO	$ 17.00
TOTAL	$101.00
> SPOT CABLE *	$ 2.00

* (CABLE HH's: 46 MILLION H.H.)

SPOT CABLE REVENUE/HH IS 2% OF TOTAL IN CABLE HOUSEHOLD UNIVERSE

(SOURCE: PKA MEDIA INDEX 8/21/91)

The ultimate question then is "What is Local Cable Advertising's revenue potential?" Unfortunately, a precise answer is not readily available, primarily because there is not an accurate way to measure the role that any one medium should ideally play in a utopian, mixed-media advertising campaign. This has been referred to as the elusive "share of voice" concept. However, we can be somewhat more precise if we begin the answer by staying within the TV advertising arena. Here, it is acceptable to assume that if TV ad spending is directly related to share of audience; then Local Cable's annual revenue potential begins at $51/HH (more than three times the current industry average).

This $57/HH is labeled the beginning of the potential, because the calculation treats all TV households and both broadcast and cable as equals. Since we know this is not the case; the premium value of cable advertising moves upward as each qualitative factor regarding cable households and the cable medium is added. So, for now, our perspective on the potential for local cable advertising should be "somewhere between a $57/HH share of TV and the $669/HH universe". (See Table 7.)

Table 7

"WHAT IS THE LOCAL CABLE ADVERTISING
REVENUE POTENTIAL?"

"FAIR SHARE OF TV ADVERTISING $?	AMOUNT
> LOCAL TV AD REV/HH	$85.00
> SPOT TV AD REV/HH	$84.00
TOTAL	$169.00
> BASIC CABLE AUDIENCE SHARE OF AD SUPPORTED TV	34%
> "FAIR SHARE" OF TV AD $	$57.46
"FAIR SHARE OF TOTAL ADVERTISING $?	
> TOTAL LOCAL AD REV/HH	$568.00
> TOTAL SPOT MARKET AD REV/HH	$101.00
TOTAL	$669.00
> BASIC CABLE "SHARE OF VOICE"	?
> "FAIR SHARE" OF AD $	?

(SOURCE. PKA MEDIA INDEX 8/21/91)

III. *"THE CABLE ADVERTISING "PRODUCT"*

What is the Cable Advertising product? What are we selling? Quick responses like: "cable spots" or "ad time on cable networks" miss the point. For the purpose of this narrative, we need a textbook definition like: "Providing advertisers with a means for communicating their marketing messages to their prospective customers". Therefore, Cable Advertising's primary Product is actually: "All the persons, in our Cable households, that watch basic cable programming, at any time; *and* our ability to place commercial messages into that programming". In other words, Viewership and Commercial Insertion Technology.

These issues also relate to the question of Potential. The "utility potential" of Advertising has three components: Value is determined by the degree to which the Advertiser's message is matched to their discrete, prospective customer (the cost per thousand, CPM concept). The number of these individuals that are reached, determines

the Price/Rate of each spot unit; which, when multiplied by total spot units (i.e., inventory) determines Utility Potential.

As a result, anything that places a limitation on the size, composition, and accessibility to the Cable Advertising Audience, diminishes Ad Sales' revenue potential; and, conversely, anything that increases the size, composition and accessibility to the Cable Advertising Audience increases Ad Sales' revenue potential.

IV. *VIEWERSHIP*

Most often the viewership issue is seen as the exclusive domain of the Cable Networks and their programming. While programming per se is a dominant factor, the MSO's can also impact viewership in many ways. While Basic Subs is not often thought of as an ad sales issue, it is, in fact, the underlying determinant of the viewership universe. The MSO's can impact the size and composition of the subscriber base through both Marketing and System Acquisitions. A System Acquisition, strategically located from an Ad Sales perspective, may affect the Ad Sales Audience value, disproportionate to its size.

Since viewership requires converting the subscriber base into a Basic Cable *Audience,* then an MSO impacts viewership with every decision regarding channel carriage, dial position, tiering/packaging and most specifically tune-in advertising/cross-channel promotion.

Similarly, an MSO's influence on future programming; with 150-channels, and programming "addressable to the home" is an Advertising Sales issue which gives rise to a paradox: If cable programming proliferation occurs ahead of commercial insertion technology, then the fragmentation of the audience will diminish the value of the spot inventory; Conversely, if commercial insertion technology keeps pace with a proliferation of basic cable

programming, then the value of each spot may increase, while the spot inventory is also increasing; thereby, significantly enhancing Ad Sales' revenue potential.

V. *COMMERCIAL INSERTION TECHNOLOGY*

As stated earlier, Commercial Insertion Technology (i.e., the ability to capture the viewership for Advertisers) is the other half of the Cable Advertising Product. It is very important to recognize that this Product-Process relationship is not a "back-office" issue; it is a revenue issue.

To understand this revenue relationship, we should remember that the objective of the Advertising Sales Process is: to reach a high percentage of the advertisers' targeted customers, with adequate repetition to cause them to make a buying decision. In media terms, this "Reach and Frequency Goal" is attained by buying "cumulative gross ratings points (GRP's) against a target demo". Demographically targeted advertising is the rational basis for selecting all media: Broadcast TV via programs; Radio via station formats; Magazines via niche titles, and now Cable via a matrix of networks and programs.

However, Cable has added a new dimension to electronic media advertising accessibility, mainly: geographic targeting. The degree to which demography also clusters geographically is a factor of growing importance to brand marketers. To local retailers, with their store location and trading-zone concerns, this factor dominates their advertising tendencies. All advertisers strive to "eliminate waste" and make their "buys more efficient".

For Local Cable Advertising, the scope of accessibility through the dynamic combination of the inventory matrix and geography (via headend specific commercial insertion) defines the Product; its value; and the attainable revenue potential. In order to discuss the specific strategic issues

related to Commercial Insertion Technology, it is appropriate to break them down into their two main components, namely hardware and software.

A. *HARDWARE*

Currently, the basic unit of cable commercial insertion hardware is a Rack of electronic and mechanical components that play-back commercial messages contained on ¾" video tape. For all practical purposes, this requires a separate Rack of hardware for as many networks as are selected to sell. When designing a commercial insertion system for a Local Cable Advertising Sales business, in a specific location, the "networks" factor must be combined with the issue of cable headend locations. If, as discussed earlier, a specific headend site should be accessible as a separate point of commercial insertion, it would require a completely redundant array of Racks. If this is not necessary, then commercial signals can be passed along to additional headends via microwave or hardlines. This is usually the point where the accessibility equals potential concept meets its first obstacle. At a cost of approximately $8K-$10K per Rack, attempting to sell all basic cable networks on all individual headends becomes a capital intensive proposition.

The next hardware issue is the process that physically manipulates each :30 piece of video tape (a commercial) and transports it into the matrix of networks, programs, locations, etc. Whether this is performed via "random access" or by "tape-reel compilation", this is the true bottleneck in current commercial insertion hardware design and the most costly component of the hardware system. In addition, most of these units are limited to processing in batches of four networks, up to a total of sixteen; thereby requiring even more than one total system if the choices

of networks and locations go beyond sixteen channels. At a cost of $80K-$125K per unit, this becomes the next capital obstacle to hurdle.

Today, these hardware issues limit the average Cable Advertising Sales operation to making less than half of its inventory available for sale; thereby losing the revenue associated with its total reach and frequency potential.

Fortunately, there are companies working on developing cable insertion hardware that utilize the latest advances in "erasible laser-disc" and/or "digital computer" technologies. Eliminating video tape and moving towards computer processing should overcome the obstacles that currently place limits on commercial insertion accessibility. It is estimated that prototypes will be available in 1992; with 1993/1994 as a probable horizon that would make a company-wide conversion of technology possible. This timing is such that our Company management should become more knowledgable of this evolution and should begin to plan for it.

B. *SOFTWARE*

The other half of the Commercial Insertion Technology issue is defined by the *Software* that drives the Process. This two-part software is usually referred to as the Traffic and Billing System. Traffic is the component that is fundamental to the creation of revenue potential, because it is within this software that the degree of Accessibility to the commercial insertable inventory is determined. In other words: if the combination of ad insertion hardware and Traffic software enables the maximum accessibility to individual spots (i.e., fixed positions), then revenue potential is increased; as compared to random rotations (i.e., ROS) in which revenue potential decreases significantly.

The Traffic system's other role is Inventory Management. This is the interface with the sales force to convey inventory availability and enables advertising schedules to be developed that maximize Reach and Frequency. In other words, the Advertising Sales Manager's and Account Executive's ability to know: What has been sold?; What is still available?; and How does that change? *each time* a new sale is made.

The vendor software that is available today (Compulink, CCMS, Arvis, Intabs, etc. and Warner Cable's "Soft-Link") are based on archaic PC designs which use a multi-step process that makes Inventory Management either very difficult or impossible. As a result, most advertising sales operations are fraught with a combination of unsold, missed-opportunities and oversold conflicts; each of which waste the resources of the sales and support staff; and convey a "very unsophisticated" image in the marketplace. (In Warner Cable, we have documented that between 20-30% of a Traffic Operator's time is related to resolving scheduling conflicts, missed spots, and makegoods; that are endemic to their software's design.)

Warner Cable's current Advertising Sales operations are a representative sample of the range of accessibility in the industry. Some Divisions have some of the better systems currently available, while others have varying degrees of archaic hardware that places *real limitations* on their potential revenue. For example: In one Division—where advertisers can buy fixed-position spots, through a single point of insertion for all our households—81% of spot revenue comes from ad agencies. In another Division—advertisers can only buy ROS, but on 13 different local headends—only 15% of spot revenue comes from agencies with 64% from local retail clients. This also results in a revenue differential of $23/sub in the first

Division versus $13/sub in the latter. (See Tables 8 & 9.)

Table 8

AD SALES REVENUE/HH: BY MARKET SEGMENT
"% of DIVISION TOTAL"

System	Local Agency	Local Direct	Nat/Reg Rep	"Other"
"A"	81%	5%	10%	4%
"B"	65%	3%	14%	18%
"C"	15%	64%	6%	15%
"D"	49%	4%	18%	29%
"E"	43%	33%	8%	16%
"F"	46%	24%	17%	13%
"G"	82%	12%	4%	2%
"H"	22%	35%	21%	22%
Average	54%	20%	12%	14%

(1990 Actuals)

Table 9

AD SALES REVENUE/HH: BY MARKET SEGMENTATION
(1990 ACTUALS)

System	Local Agency	Local Direct	National Spot	"Other"	Total	Average Month
"A"	18.65	1.25	2.40	0.89	23.19	1.93
"B"	13.99	0.74	3.07	3.92	21.72	1.81
"C"	1.88	8.34	0.89	1.88	12.99	1.08
"D"	5.81	0.51	2.14	3.50	11.96	0.99
"E"	4.93	3.84	0.94	1.91	11.62	0.97
"F"	5.16	2.70	1.94	1.42	11.22	0.94
"G"	8.09	1.16	0.44	0.21	9.90	0.83
"H"	1.91	3.14	1.90	1.99	8.94	0.75
Average	7.55	2.71	1.72	1.97	13.94	1.16

Fortunately, there is light at the end of this tunnel. A few vendor companies are currently in the final stages of developing and testing a true "real-time, scheduling/traffic and billing system" for cable advertising sales. Both Cox and Times-Mirror are currently Beta-Testing this

software in 2 Field Operations. It is anticipated that this software will be available for industry-wide proliferation by mid-1992. Since these designs include interactivity with existing hardware and multi-headend configurations, it represents the type of revolutionary technological advance that will raise the revenue potential of the entire business to new levels.

VI. *STRATEGIC POSITIONING*

During its first decade, Cable Advertising's Strategic Positions has been to gain acceptance as a component of TV advertising; and to strive toward attaining a fair-share of existing TV advertising budgets. Most, if not all, of the research, sales support material and training in use today by the Cables sales force focuses on demonstrating the benefits of cable versus broadcast television.

As Cable Advertising enters its second decade, this self-imposed limitation as an alternative form of TV advertising should be supplemented by capturing the Strategic Position of "Cable Advertising—as a separate category—that reaches targeted consumers in ways previously achieved only through combinations of TV, radio and print." Remember, all advertisers strive towards "eliminating waste" and making their "buys more efficient." As national brand marketers and local retail advertisers move from Mass Marketing (via Mass Media) towards Micro Marketing Strategies, cable can become the medium of first choice and not the "after thought." In particular, Local Cable Advertising Sales must launch a strategic attack to migrate Ad Dollars away from the Newspapers, the largest local ad medium; whose rates remain high, while their circulation and demographics shrink.

Fortunately, while strategies and tactics evolve to attain this new position, we can continue to maintain/grow the "fair share of TV" position; by continuing to serve the current needs of ad agency planners and buyers; at the

same time that we address the more evolutionary needs of client/company marketers.

To capitalize on these Strategic Positions, key sales management and product management issues need to be addressed, such as: Research, Sales Software, and People.

A. *RESEARCH*

The Sales Force serves their advertising customers by helping them find their targeted consumers from within the Cable Network audiences. The ability to do this is based on what is known about the audience and whether this knowledge can be credibly demonstrated. Today, the typical Ad Sales inventory contains 8,000 spots/week. In the future, this could easily become 100,000 spots/week. "Who does each spot Reach?" Primarily, this question is answered by an array of syndicated research services that individually focus on a portion of the answer, in categories such as: viewing levels; demographics; psychographics; geographics; etc. (See Table 10.)

Table 10

ADVERTISING SALES: RESEARCH/SOURCES

VIEWERSHIP	PROGRAMMING
- "RATES/SHARES"	- ALL NETWORKS
- "REACH/ FREQUENCY"	- CABLE AD RESOURCES
- NE EN	- UNIBASE
- ARBITRON	
DEMOGRAPHICS	**PSYCHOGRAPHICS**
- "VPVH"	- "CLUSTERS"
- CENSUS	- "PRODUCT USAGE"
- MRI	- MRI
- POLK	- SIMMONS
- TRI-NET	- MART/IMPACT RESOURCES
- COMPASS	- CLARITAS
- CABLETRACK	- DONNELLY

Today, the typical Cable Advertising Sales presentation to agencies and clients has moved from the old "conceptual discussions" to demonstrations of the "facts" in each of the aforementioned categories. Since the pressure to provide this information is steadily increasing from both the marketplace and the sales force, Company Management must enable every Advertising Sales Department to access adequate research resources.

B. *SALES SOFTWARE*

At the present time, providing research based information is not just limited by the cost of an adequate array. Quite frankly, the sales force's use of research falls somewhere between what they can afford and what they can *handle*. Wading through databases in as many as 8 categories (see Table 10), then to manually/mentally cross-reference these to their advertisers' needs, and then to tens-of-thousands of spots is so mind boggling that few actually attempt it. The obvious solution to this dilemma is computer assistance. Software (and/or a new research service) that combines all available syndicated research into a single PC work station must be developed to meet Local Cable Advertising Sales needs. This software, usually referred to as a Front-end Sales/Planning System, should also interface with the future Real-Time Scheduling software to move from the presentation of generic schedules to the presentation of client specific schedules based on actual available inventory. This interface could also provide for a computer driven "price optimizer" by constantly computing the relationship between rate, actual sell-out levels, supply and demand, etc.; in ways that are not humanly possible. It is also realistic to envision an environment in which this Planning/Scheduling System is integrated with advertising agency's own

software systems, which currently guide their planners as to how they should buy TV, Radio and Print; so that buying Cable Advertising may become as automatic as many other local media transactions are today.

Again, fortunately, there are some vendor companies developing these Sales Software Systems. ATC is currently installing "Cable Ad Resources'" software in Rochester as a procusor to a Cable Group licensing agreement. This should be available mid-1992; and will contribute to raising the revenue potential significantly.

C. *PEOPLE*

As developments in Viewership, Commercial Insertion technology and Sales Software occur, it will redefine the environment in which Ad Sales People perform. While companies typically view people as a business as usual issue; in Cable Ad Sales, the People component has already become a revenue-related Stratigec Growth Issue, as Competence Standards continue to evolve.

The focal point of the People issues is the Local Advertising Sales Manager and their two most important roles: Inventory Manager and Sales Manager. As an Inventory Manager, they must understand inventory-maximization concepts; how these apply to cable spot inventory; and how to apply "commodity pricing" techniques: i.e., acting and reacting, on an ongoing basis, to changes in the competitive marketplace to optimize price setting. As stated previously, this must occur in the realm of computer-assisted, information management. Therefore, Personal Computer competence, coupled with an understanding of statistical methods, must become prerequisites for this position.

As a Sales Manager, they must manage a multi-faceted, market-segmentation attack that maximizes the potential of agency-driven clients; local retailers; and competitively migrate budgets ($'s) away from TV, Radio, and Newspapers. In addition, they will have to hire, train and direct an Account Executive staff whose own standards will be higher than today. Cable Ad Sales Account Executives will also need PC and statistical abilities; as their sales proposals and presentations move from: selling "concepts"; to selling "by the numbers"; and their administrative environment converts from paper to a PC.

Within the next two years, MSO's face the challenge of: training its current Ad Sales Manager and staffs as the strategic direction and technological environment evolves; and dealing with the likelihood of turn-over as the new standards out-pace the abilities of incumbents.

In addition, the MSO's must continue to address the issue of providing the appropriate compensation and incentives to attract and maintain this higher caliber of Local Ad Sales management and staff.

Also, within the next two years, Advertising Sales must have access to the engineering/technical support that is necessary to analyze anu implement the revolutionary hardware and software conversions that will be forthcoming.

VII. *LOCAL PROGRAMMING*

Thus far this narrative has focused primarily on the Basic Cable Network spot avails. It is important to point out, that even when the capacity to access this inventory improves, this inventory is, nonetheless, finite. Unlike local TV and Radio—but more like Newspapers—Cable Systems may be in a position to create "as much inventory as they can sell." This relates to the issues of Cable

Operators becoming programmers of their own local channels, regional/local news channels, etc. To whatever extent these ventures are successful in attracting an audience; Cable Advertising Sales potential also increases proportionately with its ability to reach these audiences with commercial messages.

VIII. *THE NATIONAL/REGIONAL "SPOT MARKET" OPPORTUNITY*

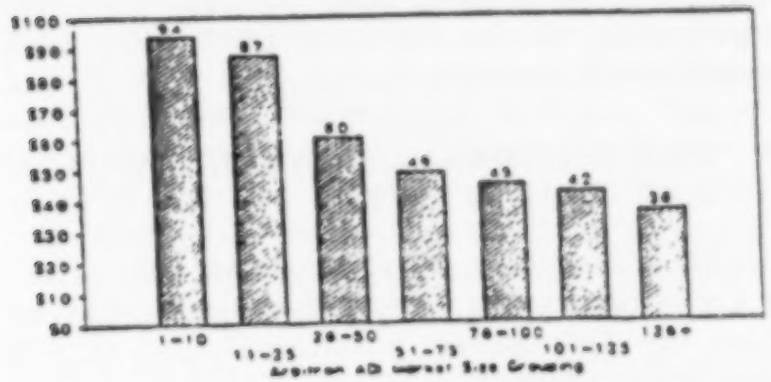
Before describing how the MSO's can help create the Spot Cable opportunity, let's first discuss: Why do advertisers buy *Spot Market* advertising?; and How big is the *Spot Market* arena?

There are three major reasons for *Spot Market* advertising. Primarily, it is utilized by *National* advertisers who want to supplement their network ad schedules with additional Reach and Frequency, *in selected markets.* Next, are the advertisers of products/Brands that are only distributed on a regional basis. The third type of *Spot Market* advertiser is a modern hybrid. These are Regional and National advertisers (many of whom are former network buyers), who are adopting Micro-Marketing strategies. While Local Cable Advertising has the potential of addressing all three of these advertiser needs; it is the growing popularity of Micro-Marketing that will enable cable to grow as a *Spot Market* medium.

Today, *Spot Market* advertising is a $9 billion arena. (See Table 5 & 6.) Unlike Local TV Advertising (which is somewhat equally distributed), in Spot TV advertising 80% of the billings are generated by 20% of the markets. (See Table 11.)

Table 11

National/Regional Advertising per TVHH
By Market Size Grouping



Applying a "fair-share formula" suggests that Cable Ad Sales' potential in the top 30 markets should be $25/sub; with an industry average potential of approximately $15/sub. At the present time, the industry average in *Spot Cable* advertising is $1.50/sub. Therefore, capitalizing on this differential may represent the *steepest*, upside-opportunity for Cable Advertising Sales.

The Strategic issues that must be addressed to attain this *Spot Cable* opportunity echo those of Local Ad Sales (i.e., People and Technology); plus a Pricing issue unique to this category.

A. *PEOPLE*

Spot Cable's People issues are the same as our *Local* issues, however, they exist within the context of 3rd Party Rep Firms. (See Table 12.)

Table 12

$ SPOT TV: SALES SOURCES

	($ Million)
NATIONAL REPS	
TELEREP	1,200
KATZ	1,200
PETRY	970
BLAIR	850
HRP	450
SELTEL	360
MMT	315
YOUNG	72
Sub-Total	5,417
DIRECT SALES	
NY/CHI/L.A.	1,412
STATION OWNED REPS	
ABC	424
NBC	278
GROUP W	266
CBS	175
Sub-Total	1,143
TOTAL	7,972

(TVB: '90)

The *Spot TV* reps had traditionally deferred to their Broadcast constituency and refrained from representing *Spot Cable*. However, many of these rep firms have addressed their own strategic future and are now interested in entering the *Spot Cable* arena. This turn of events has created an additional Strategic issue for all MSO's; and particularly for the owners and affiliates of NCA-L.P. and CNI.

B. *TECHNOLOGY*

As the present time, most of the major National Ad Agencies that control the *Spot Market* transactions are *not* willing to deal with Cable's "fulfillment limitations". As a result, the *Spot Cable* opportunity will not be realized until a "multi-market, commercial insertion/delivery system" coupled with "multi-market spot cable scheduling/traffic software" is in place.

This *Spot Cable* opportunity, however also has the added complication of requiring that its fulfillment technology be able to interact and interface with the *Local* Ad Sales technology so that the *Local* Ad Sales owner maintains control over its inventory. (The Airline Industry's reservation system has been seen as one analogy to Cable's needs.)

Since, for the most part, the *Spot Cable* Fulfillment Systems, must be newly created, it raises many issues such as: Who should own what?, Who pays for the technology explosion?; and, Who gets to play—only top markets or all markets? As evidenced by the recent emergence of *AdLink, AdExpress, AdVail, AdStar*, etc., the *Spot Circle* "stew is coming to a boil"; and the creation of a *Spot Circle* fulfillment system that answers these key questions may be possible within the next 6 months.

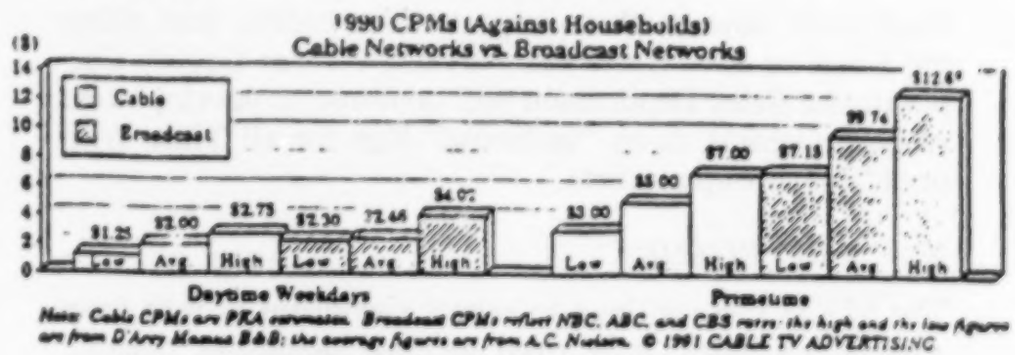
C. *PRICING*

Even if/when *Spot Cable's* multi-market fulfillment capacity is significantly improved, the cost of buying *Spot Cable* may remain as a major concern/objection of advertisers and their agencies.

In the broadcast arena, one of the elements in the *Spot TV* equation is the lower cost of buying markets at their local spot rates, as compared to the cost of buying Broadcast Network advertising time.

Unfortunately, at the present time, Cable Network advertising rates are actually lower than the costs of buying as few as 4-5 Local Cable Markets. The problem is not Local Cable costs (which are "balanced" by competitive pricing amongst all *local* media), but rather is the disparity between Cable Network and Broadcast Network costs. At the present time, on a CMP basis, Cable Networks have attained only 60% of the value of Broadcast Television. In other words, while Local Cable advertising has succeeded in attaining a premium value for its benefits; the competition between Broadcast and Cable Networks and amongst the Cable Networks themselves has driven their CPM's down. (See Table 13.)

Table 13



Unlike the other issues discussed in this narrative, the *Spot Cable* pricing issue may not have one clear strategic solution. Some believe that when *Spot Cable's* fulfillment capacity is in place, its demographic targeting benefits will continue to earn a premium rate and thereby overcome the price objection. Some also believe that while this occurs, Cable Networks CPM's will inevitably increase, to the point that nullifies the issue. Some MSO's, with interests in both Cable Network and Cable System Advertising may be uniquely positioned to analyze the implications of this issue; and influence its outcome.

IX. *"OTHER" CABLE AD SALES OPPORTUNITIES*

Without going into a discussion of the Product and Process issues associated with Cable Ad Sales' "Other" revenue opportunities, this narrative would not be complete at least highlighting the following opportunities:

- 800# direct response spots;
- 900# revenue generating spots;
- Program length "informercials" and advertorials";
- Local Production Services/Industrial Videos
- Subscriber bill insertable print ads and coupons;
- List rentals and Direct-Response print advertising;
- CROSS-MEDIA PACKAGING (i.e., Time Warner "synergy" packages).

Until such time as these opportunities evolve into either the *Local* or *Spot Cable* mainstream, Warner Cable's Corporate Ad Sales Department will continue to develop these revenue streams as an "In-House" Rep for all Time Warner Cable Group markets.

X. *"THE FUTURE"*

The MSO's can continue to expect significant growth from Advertising Sales; *both* from gaining increasing "shares" of its current potential, and by causing the potential itself to grow. However, in order to accomplish this latter source of growth, Advertising Sales must also attain; an increase in MSO Management's understanding of the strategic issues; and investments in new technologies.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME I

* * * *

May 26, 1995

[Exhibit 15]

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

MM Docket No. 90-4

IN THE MATTER OF
REEXAMINATION OF THE EFFECTIVE COMPETITION
STANDARD FOR THE REGULATION OF CABLE TELEVISION
BASIC SERVICE RATES

CARRIAGE OF TELEVISION BROADCAST SIGNALS BY
CABLE TELEVISION SYSTEMS

Reply Comment of the Staff of the Bureau of Economics and the San Francisco Regional Office of the Federal Trade Commission *

November 26, 1991

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* This reply comment represents the views of the staff of the Bureau of Economics and the San Francisco Regional Office of the Federal Trade Commission. They are not necessarily the views of the Commission or those of any individual Commissioner. Inquiries regarding this comment should be directed to Michael Vita (202-326-3493) of the FTC's Bureau of Economics or John Wiegand (415-744-7920) of the FTC's San Francisco Regional Office.

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VI. Conclusion .....

Executive Summary

Signal carriage ("must-carry") rules compel cable systems to carry local broadcast signals. In this *Second Further NPRM*, the FCC seeks to determine whether signal carriage requirements should now be adopted.

In this reply comment, the staff of the FTC recommends that the FCC take account of the welfare of consumers in assessing the desirability of new signal carriage requirements. Under conventional economic criteria for measuring consumer welfare, new must-carry rules could be justified only if three conditions are met. First, non-carriage of local signals should be shown to occur and potentially to raise sufficient concern to require a broad-based regulatory remedy. There would be little reason to compel cable systems to carry local signals if profit-seeking behavior induces them to carry the vast majority of these signals voluntarily. Second, if significant non-carriage of local signals occurs, it should be demonstrated to be the consequence of some market failure, such as the exercise of market power by the cable system. If instead non-carriage reflects cable systems' efforts to offer consumers a preferred array of programs, must-carry rules could impair the systems' ability to serve their customers. Finally, and related to the first point, if non-carriage results from market failure or market power, it should be shown that the net effect of the proposed remedy would likely benefit consumers.

This comment uses information from three sources to address these issues. These are: (1) the FCC's 1988 *Cable System Broadcast Carriage Survey Report*; (2) the 1990 GAO/FCC *Follow-Up National Survey of Cable Television Rates and Services*; and (3) the staff of the FTC's 1986 analysis of the carriage decisions of private cable systems (i.e., "SMATVs"). A review of this empirical evidence shows that most cable systems voluntarily carry all of their former must-carry stations. Most episodes of non-carriage appear to have involved

distantly-located (and duplicated) network signals and relatively low-rated commercial independent stations. Such actions would be consistent with competitively-determined carriage decisions, and would suggest generally that non-carriage decisions have not been motivated by anticompetitive considerations, such as the acquisition of market power in advertising markets. If this inference is correct, requiring systems to carry all local broadcast signals could displace programming cable subscribers value more highly and could reduce incentives to develop cable programming. Under these circumstances, consumer interests would unlikely be served by reimposing must-carry obligations on cable television systems.

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

MM Docket No. 90-4

IN THE MATTER OF
REEXAMINATION OF THE EFFECTIVE COMPETITION
STANDARD FOR THE REGULATION OF CABLE TELEVISION
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CARRIAGE OF TELEVISION BROADCAST SIGNALS BY
CABLE TELEVISION SYSTEMS

Reply Comment of the Staff of
the Bureau of Economics and
the San Francisco Regional Office
of the Federal Trade Commission [1]

November 26, 1991

I. Introduction

The staff of the Federal Trade Commission appreciates this opportunity to submit a reply comment in response to the Federal Communications Commission's *Report and Order and Second Further Notice of Proposed Rule-*

[1] This reply comment represents the views of the staff of the Bureau of Economics and the San Francisco Regional Office of the Federal Trade Commission. They are not necessarily the views of the Commission or those of any individual Commissioner. Inquiries regarding this comment should be directed to Michael Vita (202-326-3493) of the FTC's Bureau of Economics or John Wiegand (415-744-7920) of the FTC's San Francisco Regional Office.

making [2] ("*Second Further NPRM*") concerning reinstituting signal carriage requirements ("must-carry" rules) for cable television systems.

The previous must-carry rules compelled cable systems to carry local broadcast signals. They were first adopted more than twenty years ago, when cable television's principal function was to provide improved reception of local television signals (i.e., "antenna service"). These rules were held unconstitutional.[3] The purpose of the *Second Further NPRM* is to determine whether signal carriage requirements are needed in the marketplace now, and if so, whether they could be crafted to overcome constitutional objections.[4]

In this reply comment the staff of the FTC reviews evidence bearing on cable systems' carriage choices in the absence of must-carry regulation. This evidence suggests that although must-carry rules have not been in effect for several years, most of the broadcast stations that would have been entitled to must-carry status are still carried by the cable systems that formerly were required to carry them. Further, the local broadcast signals that were dropped from carriage tend to be either those of relatively remote (and duplicated) network stations, or local stations that few viewers watch. These findings are consistent with the proposition that cable systems are trying to carry the programming their customers most want to watch. If so, requiring cable systems to carry unwanted

[2] *See Report and Order and Second Further Notice of Proposed Rulemaking* In the matter of Reexamination of the Effective Competition Standard for the Regulation of Cable Television Basic Service Rates and the Carriage of Television Broadcast Signals by Cable Television Systems, Docket Nos. 90-4 and 84-1296, July 12, 1991.

[3] *See Century Communications Corp. v. FCC*, 835 F.2d 292 (D.C. Cir. 1987), *cert. denied*, 486 U.S. 1032 (1988); and *Quincy Cable TV, Inc. v. FCC*, ("Quincy") 768 F.2d 1434 (D.C. Cir. 1985), *cert. denied*, 476 U.S. 1169 (1986).

[4] *Second Further NPRM*, ¶ 111.

broadcast signals could displace programming cable subscribers value more highly and could reduce incentives to develop cable programming.

The FCC adopted the previous must-carry rules in response to two concerns. First, the FCC viewed a cable system's failure to carry local broadcast stations as an "unfair competitive practice."[5] Second, the FCC believed that such a failure would adversely affect the growth of local broadcast stations as outlets for local expression.[6]

This comment addresses certain issues raised by the first concern—whether non-carriage is now a competition problem that calls for a regulatory solution. We do not address other policies, such as the relationship between non-carriage and the vitality of outlets for local expression, that may be important to the FCC.[7] We note, however, that in recent policy statements, the FCC appears to have taken account of similar factors through a competitive, consumer-welfare centered approach. For example, in *Policies Regarding Detrimental Effects of Proposed New Broadcast Stations on Existing Stations*,[8] the FCC announced that economic harm to existing stations would no longer be considered relevant to the decision to grant a license to a new station.[9] In *National Association of*

[5] *In re CATV*, 2 FCC 2d 725, 736 (1966) (Rulemaking, Second Report and Order).

[6] *Id.*

[7] Specifically, this comment addresses issues relating to economic efficiency and competition, using price theory and welfare economics as understood in the interpretation and enforcement of the antitrust laws.

[8] 3 F.C.C. Rec. 638 (1988).

[9] The FCC had earlier adopted this policy in a limited set of matters. *See, e.g., Application of Satellite Television Corp.*, 91 F.C.C. 2d 953, 976 (1982); *Revision of FM Assignment Policies & Procedures*, 90 F.C.C. 2d 88, 98 (1982); *see also National Association of Independent Television Producers & Distributors v. FCC*,

Broadcasters v. FCC,[10] this principle was applied to issues involving competition among different methods of signal transmission (direct broadcast satellite service and local broadcast service).[11] In addition, recent interpretations of the FCC's responsibility to allocate radio facilities under § 307(b) of the Communications Act[12] suggest that this obligation should be fulfilled by considering the needs of consumers in all localities.[13]

II. Expertise of the Staff of the FTC

The FTC is an independent regulatory agency responsible for maintaining competition and safeguarding the interests of consumers.[14] In response to requests by federal, state, and local government bodies, the staff of the FTC often analyzes regulatory or legislative proposals that may affect competition or the efficiency of the economy. In the course of this work, as well as in antitrust and consumer protection research, nonpublic investigations, and litigation, the staff applies established principles and recent developments in economic theory to competition and

502 F.2d 249, 256 (2d Cir. 1974) (FCC must incorporate the nation's policy favoring competition in its regulation of broadcasting).

[10] 740 F.2d 1190 (D.C. Cir. 1984).

[11] 740 F.2d 1190, 1198 (D.C. Cir. 1984) ("existing systems [of broadcasting] . . . have no entitlement that permits them to deflect competitive pressure from innovative and effective technology").

[12] 47 U.S.C. § 307(b) ("localism policy").

[13] *See, e.g., National Association of Broadcasters v. FCC*, 740 F.2d 1190, 1198 (D.C. Cir. 1984) ("The ultimate touchstone for the FCC is thus the distribution of service, rather than of licenses or stations; the constituency to be served is people, not municipalities."); *Main Studio & Program Origination Rules*, 1 F.C.C. Rec. 536 (1986) ("Primary emphasis should be on whether the station is serving the needs of the community and not where the program originates.").

[14] 15 U.S.C. §§ 41-59.

consumer protection issues. The staff of the FTC previously has commented on various issues before the FCC on matters relating to cable television.[15]

In assessing competitive consequences of actions and policies, antitrust analysis is most concerned about the welfare of consumers. An analysis based on conventional economic criteria for measuring consumer welfare [16] would set three conditions to be met before concluding that must-carry rules are justified. First, non-carriage of local signals should be shown to occur and potentially to raise sufficient concern to require broad-based regulatory remedy. There would be little reason to compel cable systems to carry local signals if profit-seeking behavior induces them to carry the vast majority of these signals voluntarily. Second, if significant non-carriage of local signals occurs, it should be demonstrated to be the consequence of some market failure, such as the exercise of market power by the cable system. If instead non-carriage reflects cable systems' efforts to offer consumers a preferred array of programs, must-carry rules could impair the systems' ability to serve their customers. Finally, and related to the first point, if non-carriage results from market failure or market power, it should be shown that the

[15] *See, e.g., Comment of the Staff of the Bureau of Economics and the San Francisco Regional Office* In the Matter of Reexamination of the Effective Competition Standard for the Regulation of Cable Television Basic Service Rates, MM Docket No. 90-4, April 24, 1991; *Comment of the Staff of the Bureau of Economics and the San Francisco Regional Office* In the Matter of Competition, Rate Deregulation, and the Commission's Policies Relating to the Provision of Cable Television Service, MM Docket No. 89-600, April 20, 1990 (*"FTC Staff Cable Comment"*); and *Reply Comments of the Bureaus of Competition, Economics, and Consumer Protection* in the Matter of Part 76 of the Commission's Rules Concerning the Carriage of Television Broadcast Signals by Cable Television Systems, MM Docket No. 85-349, February 25, 1986.

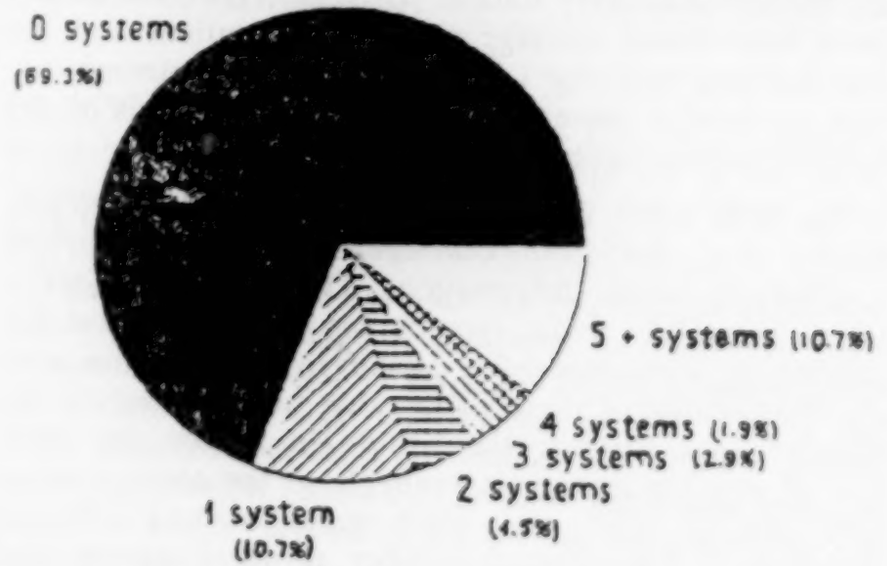
[16] Economists typically employ a measure of consumer welfare based on the concept of "consumers' surplus." *See* Henderson and Quandt, *Microeconomic Theory* (third ed.), 1980, pp. 49-52.

net effect of the proposed remedy would likely benefit consumers.

III. Empirical Evidence on Cable Systems' Carriage Decisions

Information on cable systems' carriage decisions is available from three sources: (1) the FCC's 1988 *Cable System Broadcast Carriage Survey Report ("Carriage Report")*; (2) the 1990 GAO/FCC *Follow-Up National Survey of Cable Television Rates and Services ("Follow-Up Survey")*; and (3) the staff of the FTC's 1986 analysis of the carriage decisions of private cable systems (i.e., "SMATVs").

DISTRIBUTION OF BROADCASTERS, BY NUMBER OF SYSTEMS DENYING CARRIAGE



Source: FCC Carriage Report

Figure 1

The *Carriage Report* is the most comprehensive source of information on cable systems' carriage choices in the post-must-carry period. The FCC surveyed a large number of cable systems (4,303) and broadcasters (912) to determine, among other things, the incidence of signal non-carriage among stations that would have been en-

titled to must-carry status under the old (pre-1985) standard. Most of the responding broadcasters (about 70 percent) reported that they had not been denied carriage by any cable system. Of the 280 broadcasters reporting at least one instance of non-carriage, most were denied carriage on three or fewer cable systems (*see* figure 1). In total, there was 1,533 instances of non-carriage reported by respondent broadcasters.[17] Almost half of these were reported by independent commercial stations, approximately one-fifth by noncommercial educational stations, and the remaining 30 percent were split among network affiliates and "other" (e.g., religious) stations.

The *Carriage Report's* survey of cable systems yields qualitatively similar results. Most cable systems (about 80 percent) reported that they did not deny carriage to any former must-carry station. Of those systems that did, about half denied carriage to only one station, and the overwhelming majority (close to 90 percent) denied carriage to three or fewer stations. About two-thirds of the dropped stations were non-network stations.

The 1990 GAO/FCC *Follow-Up Survey* is less comprehensive than the 1988 *Carriage Report*, but provides qualitatively similar information. The *Follow-Up Survey* asked respondent cable systems for information on the number of "local signals" available in the franchise area and the number of these signals that were carried by the system.[18] According to the *Follow-Up Survey*, the numbers of over-the-air signals available to the average cable subscriber in 1986 and 1989 were 8.4 and 8.9, respectively.[19] The average number of local signals carried on the lowest-priced basic service tier in those years

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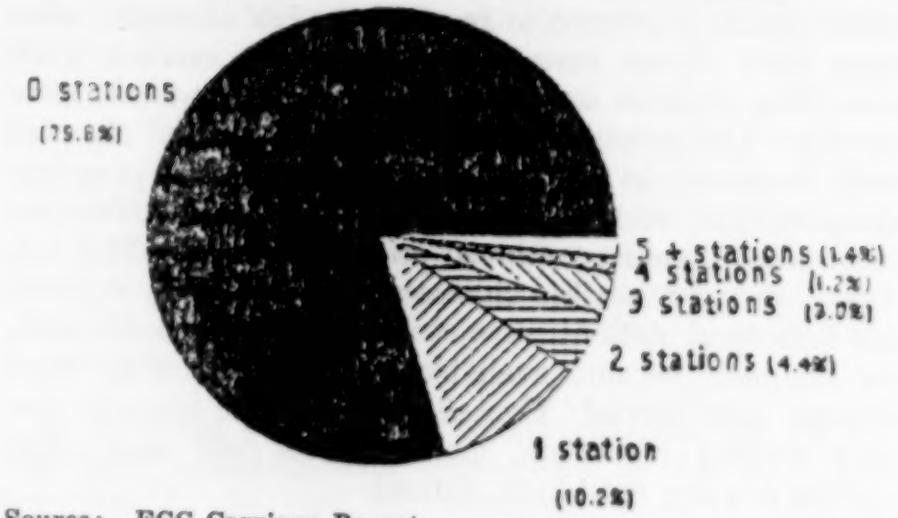
[17] If a broadcaster reported that it had been dropped by two cable systems, this would count as two instances of non-carriage.

[18] "Local signals" were defined as signals that were (1) "significantly viewed" in the franchise area, or (2) "acceptable" in the area, as defined by the FCC.

[19] *See Follow-Up Survey*, Table V.3.

DISTRIBUTION OF CABLE SYSTEMS
BY NUMBER OF DROPPED STATIONS



Source: FCC Carriage Report

Figure 2

was 7.7 and 7.9, respectively. Thus, this survey evidence suggests that, even without being required to do so by regulation, cable systems would carry most of the local signals available to subscribers over-the-air.

The third piece of information relevant to cable systems' carriage decisions is contained in the 1986 *Reply Comments* of the staff of the FTC in the previous must-carry rulemaking.[20] In this submission, the staff of the FTC analyzed the carriage choices of satellite master antenna television (SMATV) systems using data from the period 1981-85. SMATVs are private cable systems that do not cross public rights-of-way. Because SMATVs never were subject to must-carry rules, the staff regarded their carriage choices as indicative of how cable systems might behave in the absence of must-carry rules. All of the SMATVs in the sample analyzed carried the local signals of the three network affiliates. Holding constant the system's channel capacity, the proportion of local

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[20] *Supra*, note 15.

signals carried fell somewhat as the number of available local signals increased; however, a large proportion of these signals continued to be carried. For example, when three local signals were available, all were carried; when nine local stations were available, about two-thirds were carried. The proportion of local signals carried also fell with increases in the number of alternative programming sources, such as satellite channels; again, however, most local signals continued to be carried.[21] Thus, in 1981, when 35 satellite channels were available, eight of the nine local stations were carried; later, when 45 satellite channels became available, seven of the nine local stations were carried. Overall, this evidence suggests that even without regulation, market forces will lead cable systems to carry most local stations.

All three data sources show that some (although limited) non-carriage of local signals occurs. However, this does not imply necessarily that non-carriage results from market power or market failure requiring regulatory action. Instead, the particular non-carriage decisions observed could be the result of normal competitive market forces. This possibility becomes more apparent upon detailed examination of the data from the FCC *Carriage Report*.[22] These data suggest that most of the network affiliates that were denied carriage may have been relatively remote stations that substantially duplicated the programming of another network affiliate. Table 7 of the *Carriage Report* shows that in 379 out of 595 instances where a network affiliate was denied carriage, the distance between the station and the system headend was over 51 miles.[23] The mean distance was 59

[21] The term "satellite channels" refers to channels that are made available to cable systems only by satellite (e.g., ESPN and CNN).

[22] The raw survey data were provided by the FCC to the staff of the FTC.

[23] In contrast, most (78 percent) of the dropped commercial independent stations were less than 50 miles away; the mean distance

miles.[24] In 417 of these cases, the dropped station was in a different "area of dominant influence" (ADI) from the cable system.[25] Moreover, despite dropping some network affiliates, these cable systems continued to offer their subscribers roughly the same number of network affiliates, about 4, as did those systems that did not drop any stations. The decision to drop a distantly-located network affiliate that may largely duplicate the programming of a more proximate affiliate that is retained could easily reflect a desire to replace one program service with an alternative to network programming that is more preferred by the system's customers.

In the case of public television stations, the signals that were denied carriage were closer to the cable system than in the case of commercial network affiliates (43 miles versus 59 miles). However, as in the case of commercial network affiliates, those systems that denied carriage to a public television station continued to offer their subscribers roughly the same number of public stations (about 2) as were offered by systems that did not drop any stations.

For independent commercial stations, program duplication is less of an issue,[26] so a system's decision to drop

was 38 miles. For public and "other" stations, the mean distances were 43 and 33 miles, respectively. The *Carriage Report* does not provide the transmitter-headend distance for those stations that were still carried, however, and thus does not itself show unequivocally that the retained stations were closer to the system than the dropped stations.

[24] Computed from survey response data provided to the FCC staff by the FCC.

[25] A station's Arbitron ADI is geographic market measure that is based upon measured household viewing patterns.

[26] The issue does not disappear entirely, however. Some cable systems located between FCC designated television markets may have been obligated to carry independent stations from both markets. Such stations frequently feature some duplicate program-

the station may have a somewhat different motivation. Nevertheless, the motive also could be a desire to replace a relatively low-rated station with programming that viewers value more highly. Examining the rankings of the dropped signals in the last full year of must-carry (1984),[27] and using data from the cable survey, discloses that 191 of the 485 reported instances of non-carriage of independent commercial stations involved stations that did not attract a large enough audience to qualify for an Arbitron audience share rating.[28] Another 63 instances involved the lowest ranked station in the station's Arbitron ADI, and another 25 involved stations rated next-to-last. Only 20 instances of non-carriage involved stations that were ranked better than next-to-last.

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ming, inasmuch, as program syndicators would have promoted the same programming, including sports and movie packages, in both markets.

[27] The last year of must-carry was chosen to avoid the problems of inference associated with a post-must-carry year (i.e., did low ratings induce non-carriage, or were they caused by non-carriage?). Television station ratings were taken from *Investing in Television: 5 Year Ratings Review* (BIA Publications, Inc.).

[28] There appear to be a number of reporting errors in the *Carriage Report* survey. Some dropped stations were incorrectly classified as commercial independents when they were not; some dropped commercial independent stations were mistakenly included in other categories. The 485 *reported* instances of carriage denial break down as follows: 191 had no measurable audience share; 63 were ranked last; 25 were ranked next-to-last; 7 were below the median (but better than next-to-last); 13 were in the top half; 57 were incorrectly classified (i.e., were either network affiliates, educational, or "other"); 28 were home shopping networks; 83 came on-the-air after 1984; and 18 could not be identified (i.e., their call letters were not listed in the 1989 *Television & Cable Factbook*). When account is taken of commercial independents that were misclassified, the figures change to: 224 stations had no measurable audience share; 69 were ranked last; 26 were ranked next-to-last; and 85 came on-the-air after 1984. Other numbers are unchanged. The 85 stations that came on-the-air after 1984 break down as follows: 44 were unranked, and 41 were ranked last.

The *Carriage Report's* survey of independent commercial stations yields similar findings. Of the 73 independent stations that were denied carriage in 1988,[29] 50 were on-the-air in 1984; 23 commenced broadcasting afterwards. Of the former, 25 were unranked. Another 13 were the lowest or next-to-lowest station in their respective ADI's. Only 3 stations were in the upper half of the ratings distribution for their respective ADI's. For the 23 stations that came on-the-air after 1984, the 1988 rankings were: 8 unranked; 14 ranked last; and 1 ranked in the lower half (but better than last).

The figures from both surveys are consistent with the view that in many instances non-carriage of independent commercial stations may have been motivated by a desire to replace less popular stations. This does not mean that consumers' interests necessarily were served by these carriage denials. Determining whether these non-carriage decisions necessarily served consumers' interests is complicated by the fact that broadcast ratings are an imperfect measure of consumers' willingness-to-pay.[30] A station could have few viewers who nevertheless might be willing to pay a great deal to have its programming televised. In these circumstances, however, cable systems may respond better to consumer demands than would advertiser-supported broadcasters. Cable systems, unlike broadcasters, may have greater means to elicit information on the values consumers attach to different programs.[31] Conse-

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[29] The *Carriage Report* (Table 1) states that 83 independent commercial stations were denied carriage. Ten of these, however, were actually home shopping networks.

[30] *See* Spence and Bruce Owen, "Television Programming, Monopolistic Competition, and Welfare," *Quarterly Journal of Economics* 91 (1977), 103-26.

[31] Cable systems that are not subject to basic service rate regulation could place highly-valued stations on higher-priced service tiers. Viewership of these stations then would be limited to those who place a relatively high value on them. In the limiting case,

quently, a system's decision to drop a poorly-ranked station suggests that the station is both low-rated and low-valued; i.e., its cable viewers are unwilling to pay enough to cover the cable system's opportunity cost of carrying that station in place of some other. Under such circumstances, consumers' interests would not be well-served by requiring that these signals be carried.

IV. Potential Benefits of Must-Carry

A. Preventing the Exercise of Market Power in Advertising Markets

Cable systems, like broadcast television stations, receive revenues from the sale of advertising time. If a cable system is not subject to sufficient competition from other cable systems, television broadcasters, or other advertising media, a system might be able to raise unilaterally the price of its advertising time to supracompetitive levels, as advertisers would have insufficient alternative means to reach potential customers in the area served by the system. It has been suggested that non-carriage of local signals may be motivated by a desire to impair the ability of local broadcasters to compete in the market for advertising. If so, must-carry rules could be beneficial if they increase the audience size, and therefore the viability, of local broadcast stations competing with local cable systems in the market for advertising.

This theory of competitive harm posits that individual cable systems can profitably exercise or acquire market power in advertising markets through unilateral decisions to deny carriage. As explained below, however, there are a number of conditions that must hold if this theory is to explain carriage choices and provide a possible justi-

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an individual station's signal could be scrambled and sold on an "a la carte" basis. For a general discussion of these issues, *see* Minasian, "Television Pricing and the Theory of Public Goods," *Journal of Law and Economics* 81 (1964), 71-80.

fication for reimposing must-carry rules. While it may be the case that cable systems possess market power in the delivery of certain video signals to the housholds in their franchise area,[82] it does not follow from this that each cable system necessarily possesses market power in the local advertising market in which it competes.

Note first that a cable system faces a trade-off when it denies carriage to a local station. If cable viewers prefer a dropped local station to the alternative programming carried in its place, then the cable system's audience and its advertising price would be reduced by the carriage denial. On the one hand, carrying that local station would increase the cable system's audience and the price that it can charge subscribers and advertisers. But on the other hand, carrying that local station may also increase advertising competition if it increases the station's audience size, and this may tend to reduce advertising prices in the market as a whole, including the prices the cable system can charge. The decision to carry or drop would depend upon which effect predominated. An anti-competitive motive for carriage denial would be most plausible when a system's penetration rate is both high and relatively unresponsive to the system's carriage decisions.[83] Under such conditions, denial of carriage could cause the affected station to lose access to most of the households in the system's franchise area.[84]

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[82] Whether cable systems are constrained in the price they can charge for the delivery of local over-the-air signals is discussed at length, in the FTC Staff *Comment* on the Effective Competition Standard, *supra* note 15.

[83] A system's penetration rate is the ratio of subscribing households to total households passed. The average cable system has a penetration rate of 58 percent (*See* 1990 GAO/FCC *Follow-Up Survey*, p. 25).

[84] As discussed below, however, cable subscribers might still have the means to receive non-carried stations.

Second, in order for carriage denial to reduce competition, advertising sold by cable systems must compete directly with advertising sold by local broadcasters and account for a large share of this market. If purchasers of cable advertising do not regard broadcast advertising as a close substitute, a cable system would not need to reduce broadcasters' access to cable subscribers in order to raise the price of cable advertising—it could do so unilaterally.

A recent FCC working paper does suggest that cable advertising, both local spot and cable network, is becoming an increasingly close substitute for broadcast television advertising.[35] Cable advertising accounts only for a very small share of this market, however. In 1990, five years after the elimination of must-carry, cable advertising revenues accounted for only 6 percent of total video advertising revenues.[36] This small fraction suggests that even if denial of cable carriage to some stations could result in a monopolistic reduction in the quantity of advertising time, the principal beneficiaries of this reduction would be other broadcasters, which continue to produce most of the output in this market. Also, unless the local stations (especially those that continue to be carried) could be prevented from increasing their output of advertising time in response to the incentives created by cable's supracompetitive advertising price, expansion of output back to the competitive level would tend to occur.[37]

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[35] *See* Setzer and Levy, "Broadcast Television in a Multichannel Marketplace," *FCC OPP Working Paper Series No. 26*, June 1991, pp. 129-31.

[36] In 1990 total broadcast television advertising revenues were $26,616 million. By contrast, total cable advertising revenues were $1,789 million. *Source*: Setzer and Levy, *supra* note 35, Table 24.

[37] Given the large fraction of market output contributed by these producers, only a small percentage increase in their collective output would be necessary to restore the competitive price and output. *See* Landes and Posner, "Market Power in Antitrust Cases," *Harvard Law Review* 94 (1981), 937-83, esp. pp. 946-47.

The anticompetitive motive for carriage denial is most plausible when the cable system's franchise area is large relative to the total area served by the affected broadcast station. A system that serves only a small fragment of the station's total potential audience has a very limited ability to harm that station through unilateral actions. A decision not to carry a station would be unlikely to contribute significantly to the station's failure; other anticompetitive effects also would be minimal.

To illustrate, consider a cable system with 10,000[38] subscribers located within a metropolitan area (i.e., ADI) of 1,000,000 households.[39] Although this system may have unilateral market power that it can exercise against the households in its franchise area (e.g., by raising the price of cable service), it is not clear that it could profitably undertake a unilateral anticompetitive strategy against a broadcast television station. This system's carriage choice will have only a minor effect on that station's viewership (which is drawn from the entire metro and surrounding areas), and thus on the station's advertising revenues and profits. Moreover, the attendant anticompetitive "gains" to the cable system, whatever their magnitude, would be shared in part with all of the other local cable systems and broadcasters serving other parts of the broadcast area, while the costs (in terms of reduced consumer and adver-

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[38] According to the *Carriage Report*, the average number of subscribers on systems that dropped at least one must-carry signal was slightly more than 10,000.

[39] To use a real-world example, consider the Washington, D.C. "area-of-dominant influence" (ADI). According to the 1989 *Television & Cable Factbook*, there are 22 cable systems serving this ADI, which contains about 1.6 million television households. When account is taken of multisystem ownership, the number of independent systems is 14. The Herfindahl-Hirschmann index (HHI) for these systems (based on the each system's share of total cable subscribers) is 1,438. An HHI computed for total television households would obviously be much smaller.

tiser demand for the system) would be borne solely by the system denying carriage.

Accordingly, when (as will often be the case) a metropolitan area is subdivided into multiple independent cable franchise areas, a significant anticompetitive effect from carriage denial may require express coordination among these cable systems.[40] Otherwise, each system would find it most profitable to carry popular local stations, thus avoiding any loss of subscription and direct advertising revenue, and to "free ride," at least to some extent, on the higher advertising prices that result from the other systems' actions. Of course, if each system were to follow this individual strategy, the joint strategy of reducing advertising time via carriage denials would fail. This coordination problem would fail to arise only if the cable system's franchise area covered a large portion of the affected station's reception area.

Finally, carriage denials could be anticompetitive only if subscribers had no other low-cost way to continue to receive non-carried signals. If subscribers can receive the non-carried signals satisfactorily over the air, they could, in theory, thwart any anticompetitive denial of carriage on cable systems. Consumers with cable service may be able to receive non-carried broadcast signals in several ways. Some televisions and VCRs have built in capacity to receive two inputs simultaneously, allowing easy access to both cable system signals and signals received through a traditional antenna. Many households with a television served by cable have other televisions that are not connected to cable, and thus continue to receive broadcast signals on them. A basic way to receive non-carried signals on a set connected to a cable system is an "A/B"

[40] Such conduct would be a *per se* violation of Section 1 of the Sherman Act, 15 U.S.C. § 1. *Northern Pacific Ry. Co. v. United States*, 356 U.S. 1, 5 (1958); *Fashion Originators' Guild of America v. FTC*, 312 U.S. 457, 468 (1941).

switch connected to an antenna.[41] The switch itself is inexpensive and easy to install. Using an A/B switch could be more difficult and costly for cable subscribers who have dismantled, or who have never had, an exterior or separate antenna.

Few surveyed cable households reported ever having used an A/B switch,[42] suggesting that consumers tend to find that its costs exceed its benefits. But that result may be due not to high costs, but to low benefits from receiving broadcast signals in addition to cable signals. Factors contributing to low benefits would include the continued high rate at which local stations are carried on cable, the infrequency with which some non-carried stations are viewed, and the duplicative nature of other non-carried stations. If cable systems attempted to behave anticompetitively, by decreasing the rates at which they carried local stations, in order to exercise market power, installing or using an A/B switch might enable their subscribers to have continued, low cost access to local broadcast stations, even if A/B switch utilization is currently very low.

The empirical evidence presented in § III on cable carriage choices provides little support for this anticompetitive theory. First, most systems did not deny carriage to any of their former must-carry stations, indicating either that cable market power in advertising markets is absent, or that the likely decrease in audience size and profits from

[41] An A/B switch operates much like the AM/FM switch on a car radio. When the switch is in one position, the television set receives broadcast signals; in the other position, the set receives cable signals.

[42] *See Comments of the National Association of Broadcasters* In the Matter of Reexamination of the Effective Competition Standard for the Regulation of Cable Television Basic Service Rates and for the Carriage of Television Broadcast Signals by Cable Television Systems, MM Docket Nos. 90-4 and 84-1296, September 25, 1991 ("NAB *Comments*"), pp. 32-34.

carriage denial is large relative to any anticompetitive gains in advertising revenue.[43]

Second, when carriage denial did occur, it often involved stations that either did not sell advertising or that accounted for only a trivial share of the total television advertising market. The *Carriage Report's* surveys of cable systems and broadcasters show that a large percentage (between 36 and 39 percent) of the instances of carriage denial involved either public television stations or other noncommercial (e.g., religious) stations.

Third, the cable system survey showed that about 30 percent of all carriage denials involved network affiliates that appear to be located a substantial distance from the cable system. About 70 percent of these network affiliate carriage denials involved stations that served an ADI different from that served by the cable system. Dropping distantly-located stations seems inconsistent with the advertising monopoly hypothesis; a desire to restrict the quantity of advertising time in a cable system's own market would lead it to deny carriage to a local station, not a remote one (e.g., Washington-area systems would presumably wish to drop Washington-area affiliates, rather than those from the Baltimore-area).[44]

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[43] The FCC may wish to conduct a more detailed study of cable carriage choices to fully determine if there were any systematic differences between systems that dropped stations and those that did not.

[44] We also note that recent regulatory changes would now discourage the carriage of these signals. Under the network nonduplication rules that became effective in 1990 (47 C.F.R. §§ 76.92-76.97), less distant network affiliates can, in most cases, demand that a cable system "black out" all network programming on a more distant affiliate of the same network (e.g., the Washington-area NBC affiliate could demand that Washington-area cable systems black out the network programming component of the Baltimore-area NBC affiliate's telecast). In such circumstances, a cable system would likely carry only the less distant network affiliate.

Fourth, the remaining carriage denials (30 percent) involve commercial independent stations that tended to have very low audience shares even when they were entitled to must-carry status. Again, this behavior is inconsistent with the advertising monopoly hypothesis. Denying carriage to stations that viewers seldom watch is not a promising anticompetitive strategy for reducing advertising output.

B. Eliminating Other Distortions in Cable Systems' Carriage Choices

An alternative rationale for regulating cable systems' carriage choices might be based on the premise that each system has market power in the distribution of programming. Generally speaking, a system with market power might be expected to alter the quantity and quality of the programming it offers relative to what would be offered if it behaved competitively. Economic theory demonstrates that a monopolist's level of quality can differ from that arising under competition.[45] But theory does not say whether quality will exceed or fall short of the competitive quality. This means that even when the exercise of market power by cable systems changes programming choices, the direction of the change is indeterminate. Some cable systems with market power might carry fewer local stations than their subscribers would receive under competition, but others might carry more. Where customers would prefer that the system carry more local stations, it does not follow that they would prefer the system to carry all of the local stations, or that carrying all of them would increase consumers' surplus. Thus, reimposition of a rule requiring carriage of all local stations could ultimately harm rather than help consumers.

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[45] *See* Leffler, "Ambiguous Changes in Quality," *American Economic Review* 72 (1982), 956-67, and Besanko, Donnenfeld, and White, "The Multiproduct Firm, Quality Choice, and Regulation," *Journal of Industrial Economics* 36 (1988), 411-29.

V. The Costs of a Must-Carry Rule

The empirical findings cited earlier imply that a must-carry rule would not affect the majority of cable systems, because they carry all local stations voluntarily. But that does not mean a must-carry rule would be costless. Adoption of the rule could generate two types of costs, whose magnitudes are admittedly difficult to estimate. Although these costs may be small, they nonetheless could exceed any benefits associated with must-carry.

First, for those systems where the requirement would increase the number of local stations carried, the rule could cause them to eliminate some currently-carried nonlocal stations or programming sources. If these systems cannot alter their channel capacity when the rule is adopted (e.g., because it is costly to alter capacity quickly), the number of nonlocal stations carried would be reduced to accommodate the greater number of must-carry stations. The empirical evidence presented earlier suggests that this could often represent a shift from a preferred to a less-preferred array of channels, which would reduce the welfare of consumers.

Over the longer run, affected systems could find it profitable to increase their channel capacities to avoid discontinuing certain program choices otherwise replaced by must-carry stations. The cost of this capacity expansion would likely be reflected in higher cable rates to subscribers. Moreover, depending upon the costs of adding channel capacity, some program services that would have been offered absent the rule might be unprofitable to carry, even after affected systems adjust their channel capacities.[46]

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[46] For example, suppose the following: the incremental cost of adding a thirteenth channel to a twelve-channel cable system is $100, while the cost of adding a fourteenth channel is $200; absent a must-carry rule, with thirteen channels available the system would offer four out of five local broadcast stations and nine satellite services. Suppose also that the lowest incremental revenue generated by any satellite service carried is $150. Now, if a must-carry rule requires the cable system to carry all five local broadcast stations, carrying all nine satellite services as well would require spending $200 to add the fourteenth channel. That would be a money-losing proposition, because the last satellite service generates only $150 in revenue. A profit-maximizing cable operator would not invest in the additional capacity necessary to carry that service.

A must-carry rule also could reduce somewhat programmers' incentives to make expenditures on programming. To retain carriage in an unregulated market, satellite programmers and broadcasters compete to demonstrate their program's attractiveness to viewers and their profitability to cable systems. These competitive forces spur existing programmers and entrants to expend resources developing programming that they hope will attract audiences. This competition has brought about substantial growth in the quantity and variety of cable programming over the last decade. As the FCC's 1990 *Cable Report* observed:

> There is no question that the number of programming services offered by cable systems has increased substantially since the passage of the Cable Act in 1984. As we observed in the *Notice of Inquiry*, the number of existing or proposed cable services in 1984 was reportedly 67, while in 1989, the number of domestic existing and proposed pay TV and satellite cable services was reportedly 181.[47]

If certain carriage choices were to be mandated by regulation, rather than chosen voluntarily by market participants, these competitive incentives would be somewhat diminished. A must-carry rule guarantees local stations free cable carriage, whether or not their programming is

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[47] *Report* in the Matter of Competition, Rate Deregulation and the Commission's Policies Relating to the Provision of Cable Television Service, MM Docket No. 89-600, July 31, 1990, ¶ 43.

sufficiently appealing to lead cable operators to select it voluntarily. Guaranteed cable access would attenuate the competitive pressure these stations face.[48] Moreover, the initial decline in the quantity of cable systems' discretionary channel capacity would reduce the number of potential outlets for new programming services. In effect, fewer cable outlets would be available for new programming, and the risk of introducing new programming presumably would increase. Absent higher returns (and ultimately higher costs to consumers) to compensate for this higher risk, there will be fewer such investments.

One could argue, given the abundance of programming services now available, that the effect of must-carry on competition among programmers would be minimal. It bears noting, however, that this expansion of programming services occurred concurrently with a substantial increase in cable channel availability.[49] It is doubtful that this growth of programming services would have occurred without the contemporaneous expansion of cable capacity. In the short-run, when the supply of program services is fixed, it might be difficult to discern any clear impact of must-carry on incentives to develop programming services. In the long-run, however, a deleterious effect is more likely. It would be undesirable to institute a regulatory policy that would diminish the incentive to develop programming that is attractive to viewers, unless the policy provided offsetting benefits. Such benefits from must-carry are not readily apparent.

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[48] These stations would still face competitive pressure to attract audiences (and thus advertisers). The argument here is that these pressures would be diminished, not completely eliminated.

[49] According to the *Follow-Up Survey*, Table V.5, the average number of active cable channels increased by 33 percent between 1984 and 1989.

VI. Conclusion

Under the conventional economic criteria for measuring consumer welfare,[50] must-carry regulations could be justified only if: (1) non-carriage of local signals is shown to occur and potentially to raise sufficient concern to require a broad-based regulatory remedy; (2) non-carriage of local signals is the consequence of some market failure, such as the exercise of market power by the cable system; and (3) the net effect of the proposed remedy would likely benefit consumers.

A review of available empirical evidence shows that most cable systems voluntarily carry all of their former must-carry stations. Additionally, most episodes of non-carriage have involved distantly-located (and duplicated) network signals and relatively low-rated commercial independent stations. Such actions are consistent with competitively-determined carriage decisions, and generally suggest that non-carriage decisions are not motivated by anticompetitive considerations, such as the acquisition of market power in advertising markets. If this inference is correct, requiring systems to carry all local broadcast signals could displace programming cable subscribers value more highly and could reduce incentives to develop cable programming. Under these circumstances, consumer interests would unlikely be served by reimposing must-carry obligations on cable television systems.

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[50] *See* note 16, *supra*.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME II

* * * *

May 26, 1995

[Exhibit 18]

ADVERTISING REVENUES PER TELEVISION HOUSEHOLD:

A Market by Market Analysis

1992 Edition

[NAB Logo]

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* * * *

Five-Year Trend

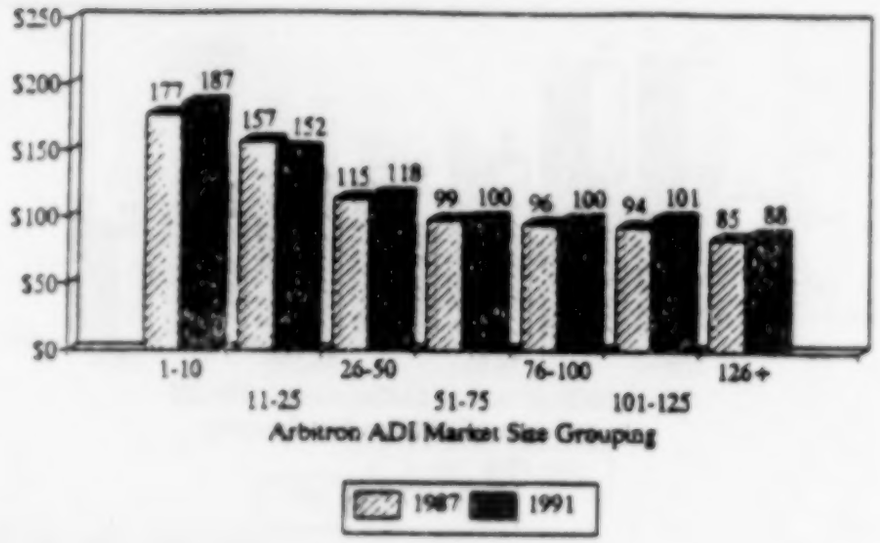
Total Time Sales

From 1987 through 1990 the television industry experienced a 16.0% increase in total advertising revenues, but in 1991 there was a decrease of 4.3%.[4] Over the entire five years, therefore, total industry advertising revenues only increased 11.0%. For advertising revenues received by stations, national spot advertising rose 3.9% and local advertising increased 10.7%.[5] While these are increases, they are noticeably lower than the previous five-year period (1983-1987) where national spot increased 41.8% and local advertising increased 57.3%.[6]

When examined on a per television household basis, the television industry is still showing increased revenues for their existing product, television households. Of the markets examined, total time sales per television household increased 0.9%, national/regional advertising actually decreased 2.2%, while local advertising increased 4.3%. These changes do not reflect any revenue fluctuations resulting from changes in the size of the markets (i.e., growth or decline in television households).

The growth in total time sales per television household varied considerably across markets. Some of the smallest markets, ADI 101-125 (+7.4%) as well as the very largest, ADI 1-10 (+5.6%) saw the largest increases on a per television household basis. Conversely, the next largest markets in ADI 11-25 actually saw a decrease of 3.2% in total time sales per television households. All of this decrease occurred in 1991 when the value dropped from $166 to the 1991 level of $152. Figure 4 shows the average values for total time sales in 1987 and 1991.

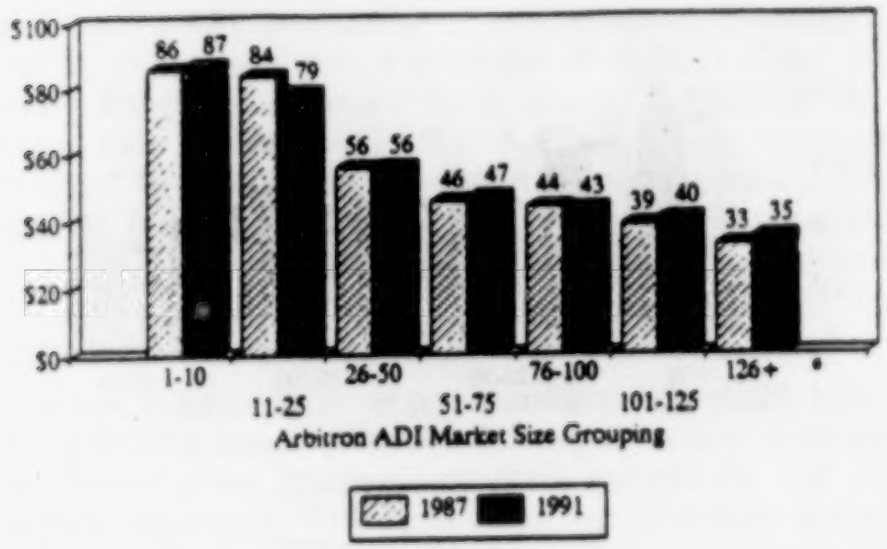
Figure 4
Total Time Sales per TVHH, 1987-1991
By Market Grouping



National/Regional Advertising

As for national/regional advertising, the average decreased across all markets was 2.2%. This decrease was led by ADI markets 11-25 which saw a decrease of 6.0%. Of course, the slowing national economy played the key role in this decrease. What is also interesting is that the smallest markets, ADI 126+, had the largest percentage increase, 6.1%. Remember, that the 1987 base for that market grouping was considerably lower than the other market groupings. Figure 5 shows the 1987 and 1991 values for the market size groupings.

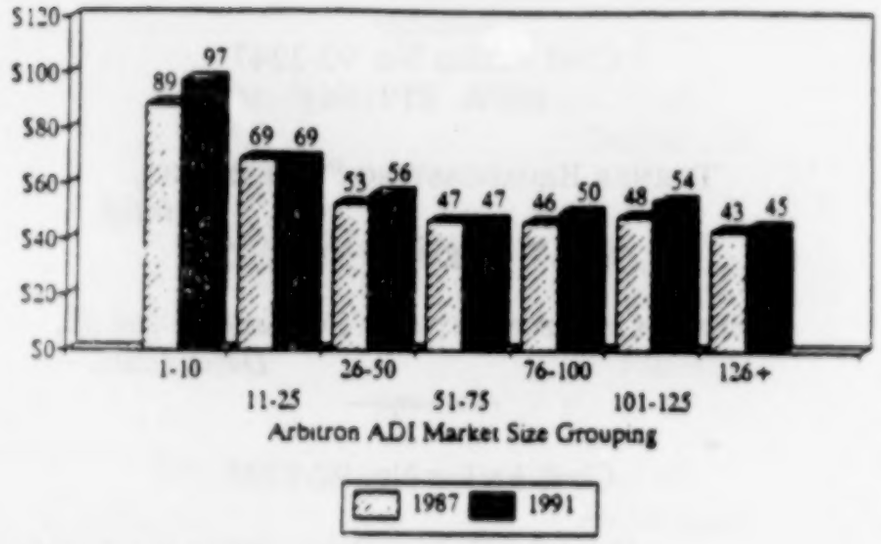
Figure 5
National/Regional Advertising per TVHH, 1987-1991
By Market Grouping



Local Advertising

On the other hand, local advertising growth showed stronger growth across more market sizes. The average across all markets for local advertising per television household was 4.3%. The smaller markets of ADI 101-125 saw the largest gain, 12.5%, followed by the largest markets, ADI 1-10 (9.0%), and ADI 76-100 (8.7%). Figure 6 shows the 1987 and 1991 values for local advertising on a television household basis.

Figure 6
Local Advertising per TVHH, 1987-1991
By Market Grouping



Regional Analysis

In addition to the market size, regional differences also help determine how well television markets have done in recent years. On a percentage basis, the East North Central markets improved the most in the past five years in terms of total time sales, given their population. Table 5 lists the regions in order of their changes of total time sales per television household.

It is not surprising to see the New England markets (CT, ME, MA, NH, RI, VT) fared the worse during the past five years. This area was the first to experience the economic slowdown and one of the hardest hit. In 1991 alone the total time sales per television households in New England dropped 16.9%. Indeed, from 1990 to 1991 the entire eastern seaboard saw the largest declines, including the New England (—16.9%), Mid Atlantic (—12.5), and South Atlantic regions (—11.3%). Overall, all but one of the regions, East South Central (AL, KY, MS, TN),

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Civil Action No. 92-2247
(SFW, TPJ, SS)

TURNER BROADCASTING SYSTEM, INC.,
Plaintiff,

-against-

FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Defendants.

Civil Action No. 92-2292

DANIELS CABLEVISION, INC.,
Plaintiff,

-against-

UNITED STATES OF AMERICA,
Defendant.

Civil Action No. 92-2494

TIME WARNER ENTERTAINMENT COMPANY, L.P.,
Plaintiff,

-against-

FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Defendants.

Civil Action No. 92-2495

NATIONAL CABLE TELEVISION, ASSOCIATION, INC.,
Plaintiff,

-against-

UNITED STATES OF AMERICA, *et al.*,
Defendants.

Civil Action No. 92-2558

DISCOVERY COMMUNICATIONS, INC., *et al.*,
Plaintiffs,

-against-

UNITED STATES OF AMERICA, *et al.*,
Defendants.

AFFIDAVITS IN MUST CARRY PROCEEDINGS

AFFIDAVIT OF EDWARD J. WEISS

[Exhibit 2]

* * * *

[PK Logo]

No. 455
June 23, 1992

CABLE TV INVESTOR

PAUL KAGAN ASSOCIATES, INC.
126 Clock Tower Place
Carmel, California 93923-8734
(408) 624-1536 • Fax (408) 624-3225

* * * *

PAUL KAGAN'S 10-YEAR CABLE TV INDUSTRY PROJECTIONS

At Year-end		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
1 TV Households	(mil.)	92.1	93.1	94.0	94.9	95.8	96.7	97.5	98.3	99.2	100.1	101.0
2 New Cable Miles	(000)	21	18	18	16	13	13	13	12	12	12	12
3 New Homes Passed	(mil.)	1.9	1.5	1.3	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9
4 Total Homes Passed	(mil.)	87.9	89.4	90.7	91.8	92.7	93.6	94.5	95.4	96.3	97.1	98.0
5 HP % of TV Households	%	95.4	96.1	96.5	96.7	96.8	96.8	96.9	97.0	97.0	97.0	97.0
6 New Basics = 40% HP (a)*	(mil.)	0.57	0.60	0.52	0.44	0.37	0.36	0.36	0.35	0.35	0.35	0.35
7 Internal Increase Sub Base (b)	%	2.7	2.3	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
8 Cable Sub Base	(mil.)	53.11	54.90	56.55	58.10	59.58	61.05	62.54	64.06	65.60	67.16	68.70
9 TOTAL BASIC SUBS	(mil.)	53.68	55.50	57.07	58.54	59.95	61.41	62.90	64.41	65.95	67.51	69.05
Wireless Subs	(mil.)	0.216	0.335	0.509	0.762	1.083	1.44	1.80	2.20	2.59	2.98	3.34
Dbs Subs	(mil.)	0.75	0.8	0.85	0.9	1	1.5	1.75	2	2.5	3	3.5
Multichannel Universe	(mil.)	54.6	56.6	58.4	60.2	62.0	64.4	66.4	68.6	71.0	73.5	75.9
% Of TV Households	%	59.3	60.9	62.2	63.4	64.7	66.6	68.1	69.8	71.6	73.4	75.1
10 Total Cable Basics	(mil.)	53.68	55.50	57.07	58.54	59.95	61.41	62.90	64.41	65.95	67.51	69.05
11 % Total Basic Increase	%	3.8	3.4	2.8	2.6	2.4	2.4	2.4	2.4	2.4	2.4	2.3
12 Net New Basic Subs	(mil.)	1.9	1.8	1.6	1.5	1.4	1.5	1.5	1.5	1.5	1.6	1.5
13 Subs % of TV Households	%	58	60	61	62	63	64	65	65	66	67	68
14 % Basic to HP	%	61	62	63	64	65	66	67	68	69	70	70
15 % Pay to Basic	%	78.0	76.2	74.8	73.7	72.7	71.7	70.7	69.7	68.8	67.8	67.0
16 % Expanded Basic to Basic	%	26.5	27.0	27.5	28.0	28.5	29.0	29.4	29.8	30.2	30.5	30.8
17 PAY SUB UNITS	(mil.)	41.87	42.29	42.71	43.14	43.57	44.01	44.45	44.89	45.34	45.79	46.25
18 Average Basic rate	$	17.95	18.85	19.79	20.78	21.82	22.92	24.06	25.26	26.53	27.85	29.25
19 Average Basics	(mil.)	52.71	54.59	56.28	57.80	59.24	60.68	62.15	63.65	65.18	66.73	68.28
20 Basic Revenue	($ mil.)	11,357	12,350	13,370	14,417	15,515	16,686	17,945	19,297	20,748	22,303	23,962
21 Expanded Basic Monthly Rate	$	5.48	5.62	5.76	5.90	6.05	6.20	6.36	6.52	6.68	6.85	7.02
22 Average Expanded Basic Subs	(mil.)	13.2	14.6	15.4	16.1	16.8	17.5	18.2	18.9	19.6	20.3	21.0
23 Year-End Expanded Basic Subs	(mil.)	14.2	15.0	15.7	16.4	17.1	17.8	18.5	19.2	19.9	20.6	21.3
24 Expanded Basic Revenue	($ mil.)	867	984	1,061	1,137	1,216	1,299	1,384	1,474	1,567	1,663	1,764
25 Average Monthly Pay Rate	$	10.28	10.17	10.07	9.97	9.87	9.77	9.67	9.58	9.48	9.39	9.29
26 Average Pay units	(mil.)	41.7	42.1	42.5	42.9	43.4	43.8	44.2	44.7	45.1	45.6	46.0
27 Pay revenue	($ mil.)	5,141	5,137	5,137	5,136	5,136	5,135	5,135	5,134	5,134	5,133	5,133

© 1992 Paul Kagan Associates, Inc. estimates.

(continued on next page)

PAUL KAGAN'S 10-YEAR CABLE TV INDUSTRY PROJECTIONS (continued from P. 6)

At Year-end		*1991*	*1992*	*1993*	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*
28 Mini Pay Subs	(mil.)	3.2	4.8	6.0	7.2	7.9	8.4	8.9	9.2	9.5	9.8	10.1
29 Average Mini Pay Subs	(mil.)	0.8	4.0	5.4	6.6	7.6	8.2	8.7	9.1	9.4	9.7	10.0
30 Average Mini Pay Rate	$	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
31 Mini Pay Revenue	($ mil.)	14.4	72.0	97.2	118.8	135.9	146.7	155.7	162.9	168.3	173.7	179.1
32 Digital Audio Subs	(mil.)	n/a	0.25	0.32	0.66	1.18	1.85	2.67	3.46	4.04	4.33	4.56
33 Average Digital Audio Subs	(mil.)	n/a	0.13	0.29	0.49	0.92	1.52	2.26	3.06	3.75	4.18	4.45
34 Monthly Rate	$	n/a	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95
35 Digital Audio Revenue	($ mil.)	n/a	15	34	58	110	181	270	366	448	500	531
36 Average Pay-Per-View Subs	(mil.)	17.35	20.25	23.60	26.70	29.90	33.55	37.45	41.35	45.25	48.95	52.15
37 PPV Mo. Rev./Average PPV Sub	$	1.86	2.47	2.12	2.39	2.78	3.17	3.71	4.25	4.82	5.09	5.38
38 PPV Revenue	($ mil.)	388	601	600	765	999	1,276	1,669	2,109	2,617	3,184	3,791
39 Avg. Mo. Rev./Basic (c)	$	28.07	29.25	30.05	31.19	32.51	33.95	35.61	37.37	39.23	41.16	43.16
40 Ann. Subscrip. Rev.	($ mil.)	17,752	19,159	20,298	21,632	23,111	24,723	26,559	28,543	30,681	32,957	35,360
41 Install Revenue	($ mil.)	318.2	323.5	325.1	329.6	334.5	341.9	348.9	356.0	363.2	370.4	376.7
42 TOTAL CABLE REVENUE	($ mil.)	18,070	19,483	20,623	21,962	23,446	25,065	26,908	28,899	31,045	33,327	35,736
43 Net Mo. Ad Rev./Sub	$	1.14	1.33	1.51	1.71	1.91	2.13	2.35	2.57	2.79	3.02	3.28
44 Net Annual Ad Rev.	($ mil.)	721	872	1,020	1,183	1,361	1,552	1,753	1,964	2,180	2,419	2,686
45 Home Shopping Rev.	($ mil.)	84	94	105	118	131	145	160	176	193	211	228
46 Misc. Revenue (d)	($ mil.)	929	1,022	1,124	1,237	1,361	1,497	1,646	1,811	1,992	2,191	2,410
47 *Avg. Mo. Rev./Basic* (e)	$	31.31	32.78	33.87	35.32	36.99	38.81	40.85	43.01	45.27	47.64	50.11
48 *TOTAL REVENUES* (f)	($ mil.)	19,804	21,471	22,873	24,499	26,298	28,259	30,467	32,850	35,410	38,148	41,060

a. 40% of new homes sign up for cable each year.
b. Percent growth of previous year-end national subscriber base.
c. Total revenue per basic sub per month from basic, expanded basic, pay-cable and PPV combined.
d. Miscellaneous revenue is from remote control units, second sets, etc.
e. Total revenue per basic sub per month from subscription services plus advertising, home shopping and misc. services.
f. Total cable industry revenue per year from all sources (no estimates for data transmission).

© 1992 Paul Kagan Associates, Inc. estimates.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME II

* * * *

May 26, 1995

[Exhibit 19]

[CPB Logo]

RESEARCH NOTES

September 1992 No. 53

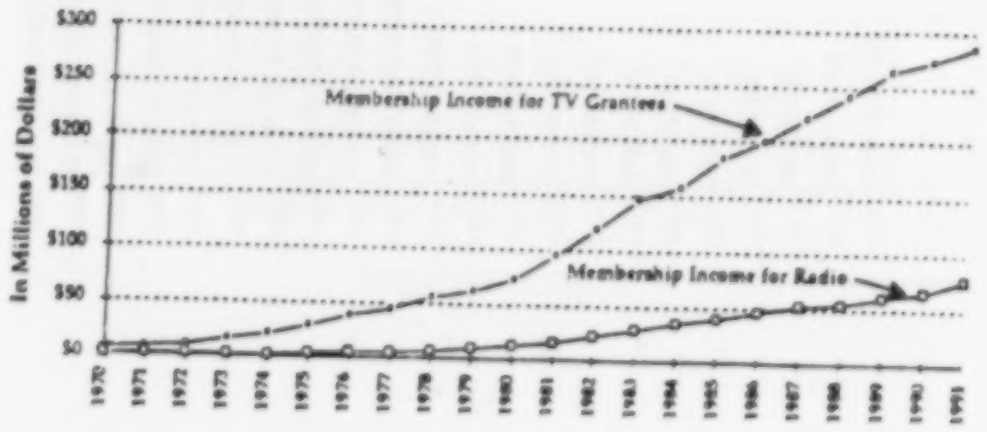
VIEWER AND LISTENER MEMBERSHIP INCOME FOR PUBLIC TELEVISION AND RADIO GRANTEES FISCAL YEAR 1991

* * * *

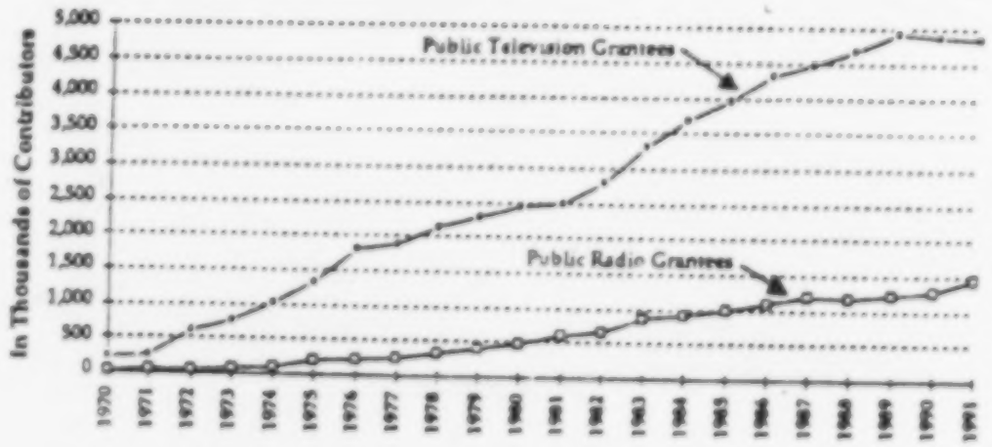
CORPORATION FOR PUBLIC BROADCASTING
901 E Street NW • Washington, DC 20004-2006
(202) 879-9600

Membership Income, Number of Contributors, and Contribution Per Contributor for Public Broadcasting Stations, Fiscal Years 1970-1991

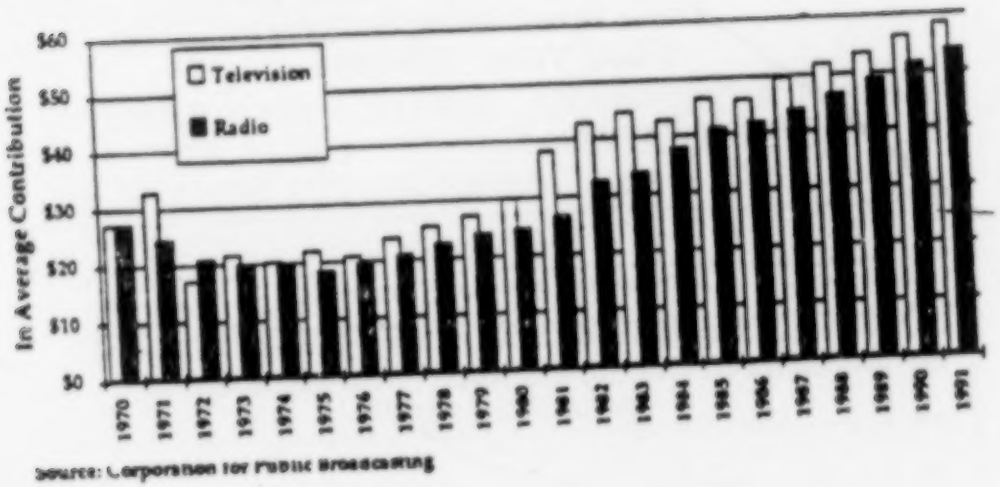
I. Membership Income



II. Number of Contributors



III. Contribution Per Contributor



Source: Corporation for Public Broadcasting

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.G

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 157]

E. Thayer Bigelow
President and CEO
Time Warner Cable Programming

[Logo]

TIMEWARNER

October 20, 1992

To: Ed Hamowy

From: Thayer Bigelow

Here is a very rough outline of some of the points you and I discussed last week on the expanded cable channel environment.

I'm in Europe this week but am reachable.

* Cable system upgrades in the future will be franchise driven or driven by new business opportunities. At the moment no new businesses offer enough economic return potential to justify plant upgrades.
* Roughly 75% of the cable industry, 42 million subs, has 35 to 40 channels. As much as 90% of these systems will be upgraded as a result of franchise renewals by 1997 to 550 Mz or 78 channels.
* The other 25% already offers between 50 and 78 channels.
* This increase in channel capacity will be achieved for the most part as the result of extensive installation of fiber optic trunks.
* These upgrades will give cable systems increased capacity to transmit data from subscribers to system head

ends. This will enable cable operators to offer many channels of pay per view services (15+ channels) as well as interactive services. To offer video on demand and telephone services cable systems would have to be upgraded to 1Ghz (like parts of BQ).

* Digital compression could be used to expand the channel capacity even further. For example, 68 channels of a 78 channel system could be devoted to analog transmission and 10 compressed 8 for 1, resulting in a 148 channel system.
* This additional upgrade would be made only if the cable operator could get incremental cash flow from pay per view, interactive services, multiplexing and new tiers of programming. To deliver compressed signals to the consumer the cable operator would have to install a new "box" which would probably cost $200. A cable operator looks for about a $1 of incremental cash flow for every $50 of investment. Thus system managers would be looking for as much as $5 of incremental net cash flow from the aforementioned businesses to justify the digital compression upgrade.

Conclusions:

* The cable bill probably will have significant impact on how the cable operator will package the programming services he offers his subscribers. Because he will be looking for incremental cash flows to mitigate constraints on the ability to increase prices and pay for the investment in new plant, cable operators will favor services that provided incremental cash flow.
* Basic services that are not universally distributed will have trouble getting carried as basics. They will be tiered.

* New cable program networks will have to be designed to go on tiers where they will be dependant on sub revenues and greatly reduced advertising revenues if they are on a low penetrated tier.
* Duplicating a universally distributed basic like USA or TNT is probably not possible.
* New tiered services will have to have good program quality and be well promoted.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

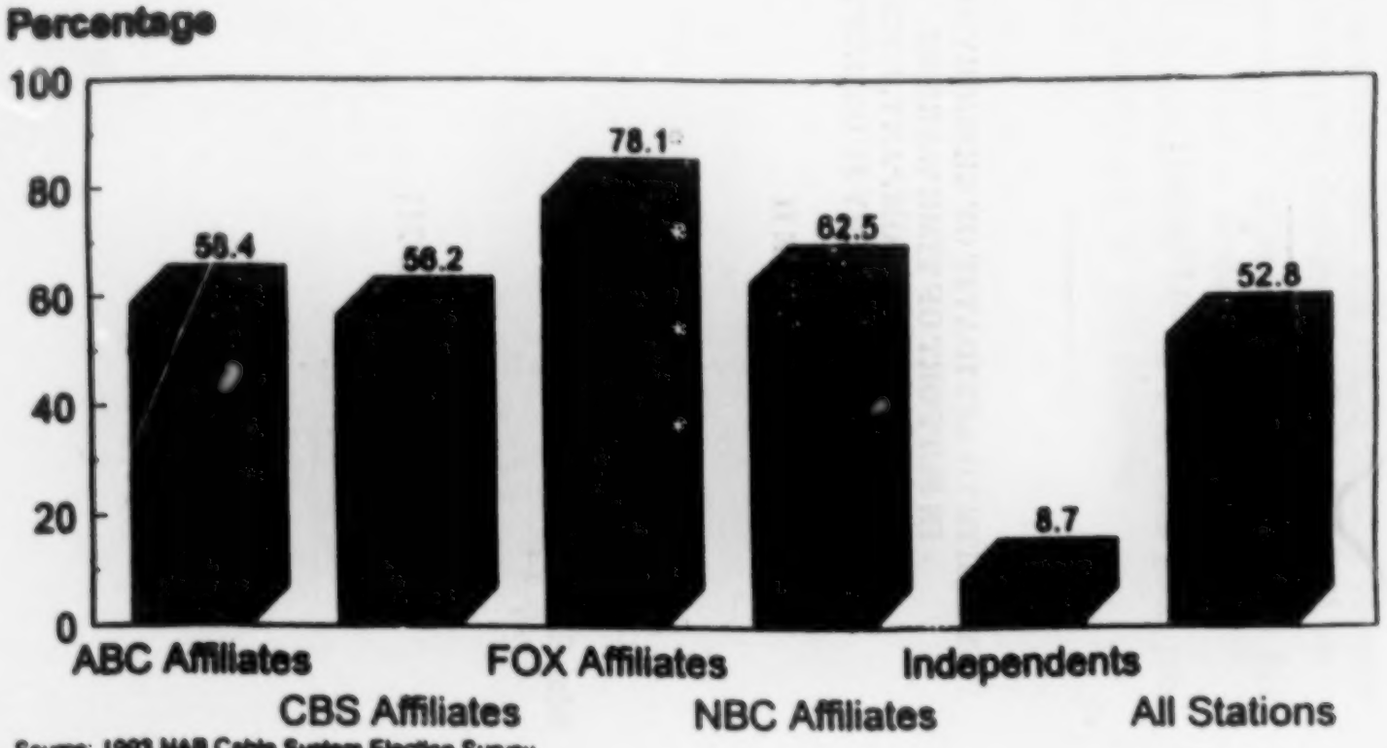
VOLUME II

* * * *

May 26, 1995

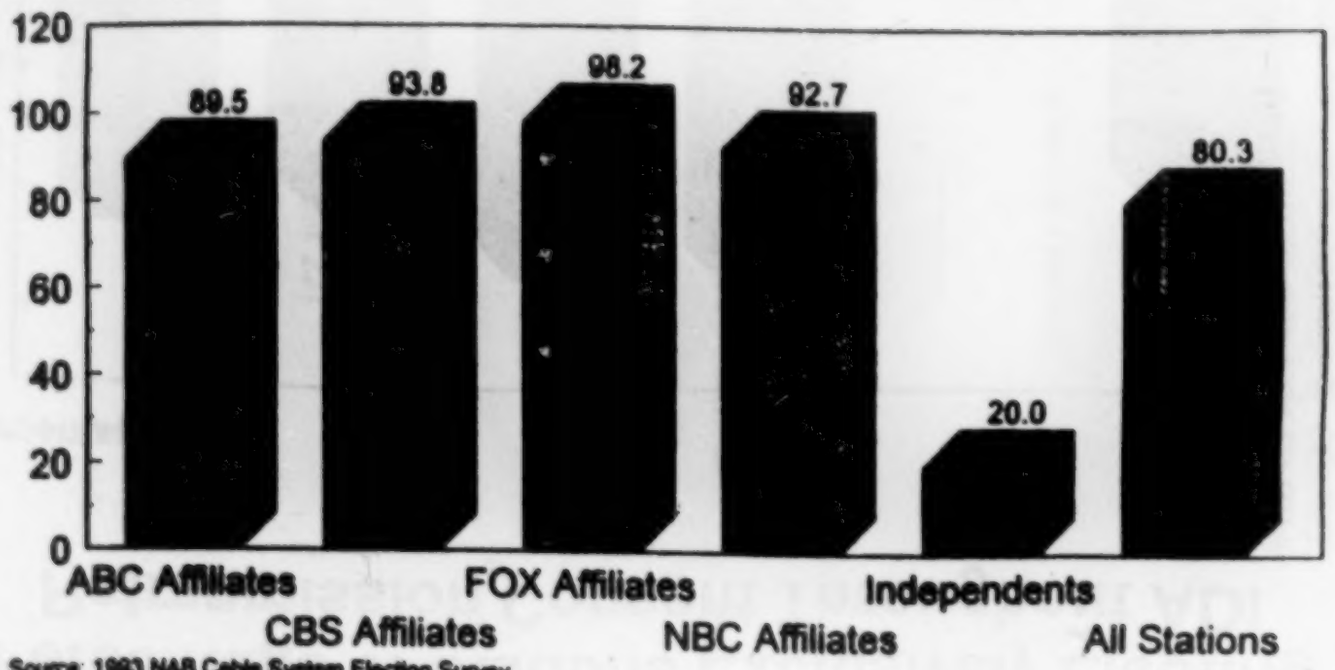
[Exhibit 21]

Percentage of Cables Systems Within ADI Where Stations Opted for Retransmission Consent



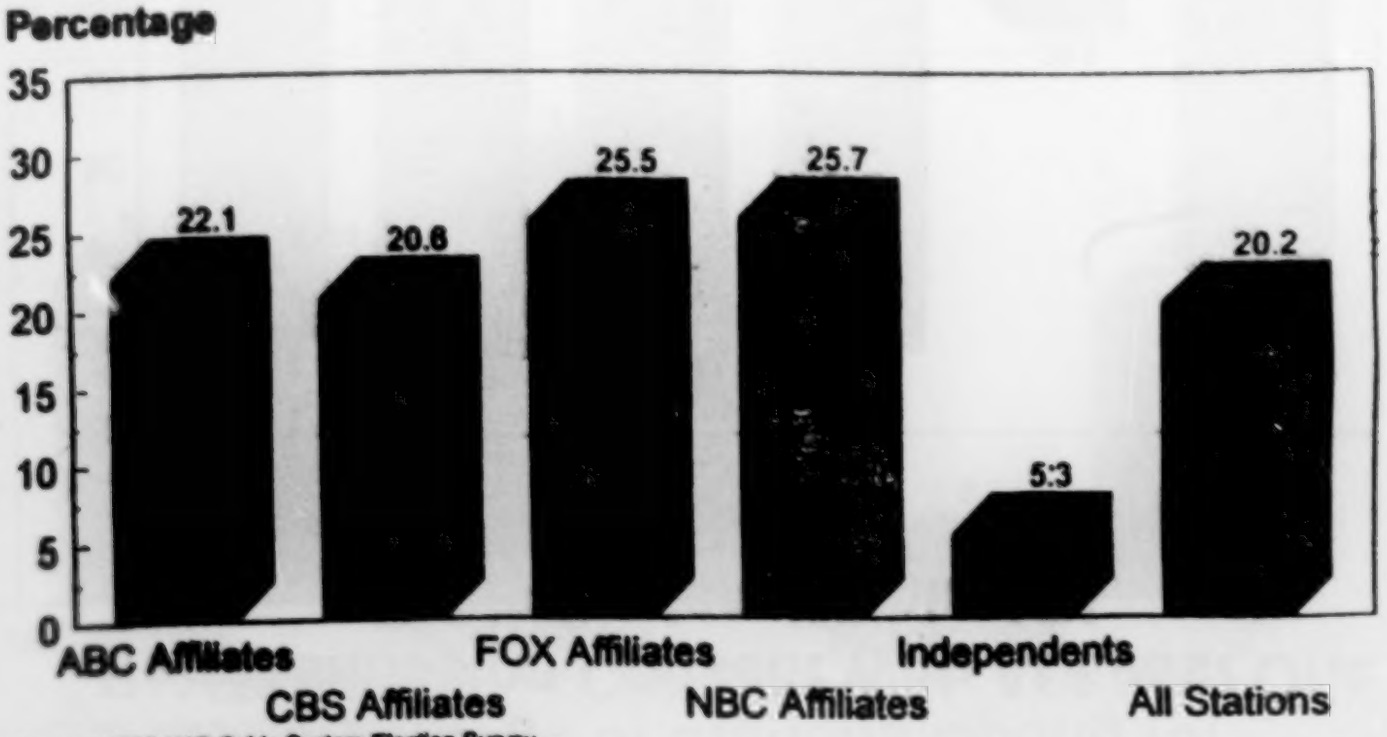
Source: 1993 NAB Cable System Election Survey
Copyright, 1993, National Association of Broadcasters

Percentage of Stations Opting for Retransmission Consent With At Least One Cable System Within ADI



Source: 1993 NAB Cable System Election Survey
Copyright, 1993, National Association of Broadcasters

Percentage of Stations Exclusively Electing Retranmission Consent Throughout ADI



Source: 1993 NAB Cable System Election Survey
Copyright, 1993, National Association of Broadcasters

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, LP'S MOTION FOR SUMMARY JUDGMENT

VOLUME II

* * * *

May 26, 1995

[Exhibit 22]

210

TELEVISION & CABLE TV STATIONS 1993

FACTBOOK

The Authoritative Reference for the
Television, Cable & Electronics Industries

Published by Warren Publishing, Inc.,
2115 Ward Court, N.W.,
Washington, D.C. 20037

Stations Volume No. 61 1993 Edition

* * * *

ANNUAL VOLUME OF ADVERTISING IN UNITED STATES

Prepared for Advertising Age by Robert J. Coen, Senior V.P., McCann-Erickson Inc. and Used with Permission By Media, 1981-1991

(In Millions of Dollars)

These are total expenditures by advertisers, not merely receipts by media.

MEDIUM		1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
TELEVISION	Total	12,848	14,636	16,759	19,848	21,022	22,881	23,904	25,686	26,891	28,405	27,402
	Network	5,540	6,144	6,955	8,318	8,060	8,342	8,500	9,172	9,110	9,383	8,933
	Syndication (national)	75	150	300	420	520	600	762	901	1,288	1,589	1,853
	Spot (national)	3,748	4,364	4,827	5,488	6,004	6,570	6,846	7,147	7,354	7,788	7,110
	Spot (local)	3,368	3,765	4,345	5,084	5,714	6,514	6,833	7,270	7,612	7,856	7,585
	Cable (national)	100	181	282	458	594	676	760	942	1,197	1,393	1,521
	Cable (local)	17	32	50	80	130	179	203	254	330	396	420
RADIO	Total	4,230	4,670	5,210	5,817	6,490	6,949	7,206	7,798	8,323	8,726	8,476
	Network	230	255	296	320	365	423	413	425	476	482	490
	Spot	879	923	1,038	1,197	1,335	1,348	1,330	1,418	1,547	1,635	1,575
	Local	3,121	3,492	3,876	4,300	4,790	5,178	5,463	5,955	6,300	6,609	6,411
NEWSPAPERS	Total	16,528	17,694	20,582	23,522	25,170	26,990	29,412	31,197	32,368	32,281	30,409
	National	2,259	2,452	2,734	3,081	3,352	3,376	3,494	3,586	3,720	3,867	3,685
	Local	14,269	15,242	17,848	20,441	21,818	23,614	25,918	27,611	28,648	28,414	26,724
MAGAZINES	Total	3,533	3,710	4,233	4,932	5,155	5,317	5,607	6,072	6,716	6,803	6,524
	Weeklies	1,598	1,659	1,917	2,224	2,297	2,327	2,445	2,646	2,813	2,864	2,670
	Women's	853	904	1,056	1,209	1,294	1,376	1,417	1,504	1,710	1,713	1,671
	Monthlies	1,082	1,147	1,260	1,499	1,564	1,614	1,745	1,922	2,193	2,226	2,183
FARM PUBLICATIONS	Total	146	148	163	181	186	192	196	196	212	215	215
DIRECT MAIL	Total	8,944	10,319	11,795	13,800	15,500	17,145	19,111	21,215	21,945	23,370	24,460
BUSINESS PUBLICATIONS	Total	1,841	1,876	1,990	2,270	2,375	2,382	2,458	2,610	2,763	2,875	2,882
OUTDOOR	Total	650	721	794	872	947	985	1,025	1,064	1,111	1,084	1,077
	National	419	465	512	562	610	600	615	628	653	640	637
	Local	231	256	282	310	335	385	410	436	458	444	440
YELLOW PAGES	Total	3,300	3,800	4,400	4,900	5,800	6,500	7,300	7,781	8,330	8,926	9,182
	National	380	433	489	580	695	759	830	944	1,011	1,132	1,162
	Local	2,920	3,367	3,911	4,320	5,105	5,741	6,470	6,837	7,319	7,794	8,020
MISCELLANEOUS	Total	8,412	9,006	9,924	11,678	12,107	12,799	13,431	14,531	15,271	15,955	15,773
	National	5,798	6,365	6,911	8,083	8,604	9,120	9,703	10,454	10,998	11,608	11,588
	Local	2,614	2,641	3,013	3,595	3,503	3,679	3,728	4,077	4,273	4,347	4,185
TOTAL	National	33,890	37,785	42,525	49,690	53,355	56,850	60,625	65,610	68,990	72,780	72,635
	Local	26,540	28,795	33,325	38,130	41,395	45,290	49,025	52,440	54,940	55,860	53,765
GRAND TOTAL		60,430	66,580	75,850	87,820	94,750	102,140	109,650	118,050	123,930	128,640	126,400

NETWORK TELEVISION BILLING, 1963-1991 *

Television Bureau of Advertising Reports
(In Millions of Dollars)

Year	ABC	CBS	NBC	Total
1963	276.8	436.7	344.5	1,058.0
1964	291.4	472.7	381.8	1,145.9
1965	338.0	492.3	430.0	1,260.3
1966	389.8	548.3	473.2	1,411.3
1967	413.0	583.6	503.2	1,499.9
1968	418.4	580.2	549.5	1,548.1
1969	444.9	650.9	601.6	1,697.4
1970	472.3	661.7	599.7	1,733.7
1971	467.9	606.7	553.1	1,627.7
1972	560.5	675.7	597.6	1,833.8
1973	619.5	728.6	695.5	2,043.6
1974	677.5	821.3	757.8	2,256.5
1975	716.6	872.5	841.8	2,430.8
1976	954.3	1,045.6	991.7	2,991.6
1977	1,242.0	1,206.7	1,170.7	3,619.5
1978	1,479.9	1,350.3	1,274.9	4,105.1
1979	1,706.5	1,564.9	1,425.9	4,697.4
1980	1,877.0	1,701.0	1,569.3	5,147.3
1981	2,009.2	1,898.0	1,685.6	5,592.8
1982	2,216.5	2,157.6	1,858.1	6,232.3
1983	2,495.7	2,373.1	2,172.8	7,041.6
1984	3,236.2	2,828.2	2,490.9	8,555.3
1985	2,688.5	2,887.0	2,738.0	8,313.5
1986	2,577.1	2,869.3	3,153.7	8,600.1
1987	2,678.7	2,825.4	3,310.3	8,814.4
1988	3,024.3	2,735.6	3,820.4	9,580.4
1989	3,019.8	2,858.9	3,680.2	9,559.1
1990	3,234.0	3,177.2	3,721.1	10,132.3
1991	3,198.0	2,920.0	3,338.3	9,456.3

* Note: These figures are estimates of net time and program billings and do not represent actual revenues to the networks. Data compiled by LNA-BAR 1963-66, LNA in 1967 & BAR in 1968-91.

McCann-Erickson

ESTIMATED ADVERTISING VOLUME
By Media, 1991 vs. 1990
Prepared for Advertising Age by
Robert J. Coen, Senior V.P., and Used with Permission

Medium (Totals)	1990 $ Millions	1991 $ Millions	% change 1991 vs. 1990
Newspapers	32,281	30,409	−5.8
Magazines	6,803	6,524	−4.1
Television	28,405	27,402	−3.5
Radio	8,726	8,476	−2.9
Farm Publications	215	215	—
Direct Mail	23,370	24,460	+4.7
Business Publications	2,875	2,882	+0.2
Outdoor	1,084	1,077	−0.6
Yellow Pages	8,926	9,182	+2.8
Miscellaneous	15,955	15,773	−1.1
Total National	72,780	72,635	−0.2
Total Local	55,860	53,765	−3.8
GRAND TOTAL	128,640	126,400	−1.7

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Civil Action No. 92-2247
(SFW, TPJ, SS)

TURNER BROADCASTING SYSTEM, INC.,
Plaintiff,
-against-
FEDERAL COMMUNICATIONS COMMISSION, *et al.*
Defendants.

Civil Action No. 92-2292

DANIELS CABLEVISION, INC.,
Plaintiff,
-against-
UNITED STATES OF AMERICA,
Defendant.

Civil Action No. 92-2494

TIME WARNER ENTERTAINMENT COMPANY, L.P.,
Plaintiff,
-against-
FEDERAL COMMUNICATIONS COMMISSION, *et al.*,
Defendants.

Civil Action No. 92-2495

NATIONAL CABLE TELEVISION ASSOCIATION, INC.,
Plaintiff,
-against-
UNITED STATES OF AMERICA, *et al.*,
Defendants.

AFFIDAVITS IN MUST CARRY PROCEEDING

February 12, 1993

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

AFFIDAVIT OF JOSEPH J. COLLINS

STATE OF CONNECTICUT,)
) ss:
COUNTY OF FAIRFIELD,)

Joseph J. Collins, being duly sworn, deposes and states as follows:

1. I am Chairman and Chief Executive Officer of Time Warner Cable ("TWC"), an unincorporated division of Time Warner Entertainment Company, L.P. ("TWE"). I am a Managing Director of TWE, and prior to TWE's formation in the summer of 1992 I was Chairman and Chief Executive Officer of Time Warner Cable Group, an unincorporated division of Time Warner Inc., which directed the operations of American Television and Communications Corporation ("ATC"), of which I was Chairman and Chief Executive Officer, and Warner Cable Communications, Inc. I have been involved in the cable industry for 20 years.

Background of Cable Television

2. Printed word is no longer the only, or even the primary, means of mass communication. The past 50 years have witnessed the development of vast new networks of electronic media for the dissemination of news, information and entertainment via television. In the first wave of the video revolution, broadcast television made possible instantaneous communication between broadcast

television stations distributing their signals from terrestrial transmitting antennas and anyone within the station's transmitting range who owned a television set. In that era, most Americans received no more than three broadcast networks and a handful of independent stations, which provided a choice of only homogenous programming. The programming was developed to suit the broadest cross-section of America. Indeed, a former FCC Chairman termed television in this first wave the "Vast Wasteland".

3. In the second wave of that revolution, cable television systems, which transmit from 12 to more than 150 channels of video programming by means of coaxial and fiber optic cable, have made it possible to communicate a vast array of news, information and entertainment programming to persons within the system's service area who pay a fee to subscribe to cable. Today over 54 million people receive cable television.

4. As part of the cable revolution, a large number of new programming services have been developed. These are typically distributed by means of satellite to cable operators and others, who in turn distribute such programming services to their subscribers. The cable revolution has made possible the development of both general entertainment programming services and more specialized services that present programming on such subjects as news, religion, financial information, government, law, education, music and minority affairs. Individual cable systems also create their own local programming services. For example, TWC's cable systems in the New York City area produce and offer to their subscribers a 24-hour local news service called New York 1.

5. In addition to cable, a number of other technologies, including home satellite dishes, video cassettes, video disks, satellite master antenna television ("SMATV") systems and multichannel multipoint distribution systems ("MMDS"), have been developed. These technologies

compete with both broadcast and cable in communicating news, information and entertainment.

6. The cable industry itself is not "highly concentrated" by any customary economic measure (the ten-largest multiple system operators ("MSOs") account for approximately 55% of all cable subscribers), and an effect of the increasing size of larger cable operators has been to enhance their ability to finance new programming ventures and thus increase the number of "media voices" that are available. Since cable television prices were deregulated by the Cable Communications Policy Act of 1984 (the "1984 Cable Act"), no fewer than 40 new programming services have been launched, many of them financed in whole or in part by cable operators.

7. Cable operators, including TWC, select which programming sources to include in the array of programming they offer their subscribers. For example, cable operators must choose from among a vast array of programming services devoted to such subjects as news and political developments (C-SPAN I and II, Cable News Network, Consumer News and Business Channel), law (Courtroom Television Network), religion (National Jewish Television, VISN), music (MTV, Video Hits-1, The Nashville Network), minority interests (Black Entertainment Television, Galavision), education (The Discovery Channel, Mind Extension University) sports (ESPN, Sportschannel) and general entertainment programming (USA Networks, WTBS, TNT).

8. In addition, cable operators develop their own distinctive programming for distribution to their subscribers. For example, many of the programming services that characterize contemporary cable communications, including Home Box Office, Showtime, MTV, C-Span, Cable News Network and Headline News, were initially developed or substantially capitalized, in whole or in part, by cable operators, who created or invested in such services to enhance their ability to compete with traditional media

such as broadcast television stations. In addition, individual cable systems create their own distinctive local news programming, as TWC has done with its New York 1 news service in New York City and with its local news services in other locations, including Ithaca and Rochester, New York and other local programming that is produced by many TWC cable systems.

9. Furthermore, many cable operators have produced their own video editorials. For example, TWC's predecessor produced a prize winning series of editorials for telecast on its systems. The series, entitled "American Viewpoints", examined many topical public policy issues. In addition, many TWC systems are very similar to local newspapers, offering national and local weather, local classified advertising, community bulletin boards and television channel listings. Furthermore, many national programming services, such as the Weather Channel and CNN, provide time for local insertions in their programming which TWC and other operators utilize.

Time Warner Entertainment Company, L.P. and Time Warner Cable

10. TWE is a partnership, the majority of which is indirectly owned and fully managed by Time Warner Inc., a publicly traded Delaware corporation. TWE is comprised principally of three unincorporated divisions: TWC, which operates cable television systems; Home Box Office ("HBO"), which operates pay television programming services and which is more thoroughly discussed in the accompanying affidavit of Jeffrey Bewkes; and Warner Bros., which is a major producer of theatrical motion pictures and television programs. Warner Bros. licenses its motion pictures for exhibition in movie theaters, on video cassettes and video disks and by video programmers, including pay-per-view services, premium servives, basic services and network and independent television stations. TWE also owns, directly or indirectly, minority

interests in various cable television programming services, which are more thoroughly discussed in the accompanying affidavit of E. Thayer Bigelow.

11. TWE through TWC and affiliated companies owns and operates cable systems in approximately 1600 franchise areas throughout the United States, which have a total asset value of approximately $8.2 billion, and which reach approximately 6.9 million subscribers. TWE and its predecessors built and acquired these costly assets with the expectation that they, like any other speaker, would have the ability to use their capacities without government interference.

12. TWC's cable systems have channel capacities that generally range from 30 to 70 channels. TWC's cable system in one test area in Queens, New York, which uses advanced fiber optic technology, has the capacity to provide up to 150 channels of programming to its subscribers. With the rapidly expanding technology in the cable industry, TWC anticipates that other systems will be able to achieve similar channel capacity.

13. We believe that one of the developments that may greatly enhance customer satisfaction will be the use of additional channel capacity for multiplexing premium channels and "near video on demand". As more fully explained in the accompanying Affidavit of Jeffrey Bewkes, under multiplexing, premium services are exhibited to subscribers on several different channels, with the same programming scheduled at different times on different channels. This allows, for example, one subscriber to watch a program that starts at 7:00 p.m. on one multiplexed channel, and another subscriber to watch the same program at 8:00 p.m. on a different multiplexed channel. HBO currently offers three multiplexed channels and Cinemax offers two. I anticipate that in the future additional multiplexed channels will be offered by other programmers.

14. "Near video on demand" is most easily explained in the context of the Queens system's Quantum programming. Quantum utilizes over fifty channels for pay-per-view movies. Depending on the popularity of the movie, a movie may be offered as often as every 15 minutes on several different channels. We believe this is a much more subscriber-friendly service because it responds to each subscriber's individual schedule. Because of this, Quantum is a prototype of programming that will be presented as other TWC systems' channel capacities increase.

15. TWC and its local divisions exercise editorial discretion in determining which program services should be offered to subscribers. In making such determinations, TWC personnel choose from among the entire array of programming services that are available. They take into account such factors as local tastes; local demographic characteristics, including such variables as age, household size and composition, income levels, occupational characteristics and educational attainments; the quality of programming; the needs and interests of identifiable segments of the local population, including minority and ethnic groups; and the availability of news, information and entertainment to cable subscribers from non-cable sources, including broadcast television stations, movie theaters, cultural and sporting events and non-electronic media. The content of programming services is often decisive in making such determinations. For example, a TWC cable system located in a conservative "middle American" community may choose to offer subscribers a greater array of Christian religious programming, while a TWC system located in an ethnically diverse urban center might place greater emphasis upon program services, including those oriented to persons who speak languages other than English, that would have appeal to large segments of the local population. For example, TWC's cable system in Queens, New York, a community rich in ethnic diversity, offers Greek, Korean and Hindi channels, among others.

16. TWC takes its programming decisions very seriously and exercises the same type of editorial discretion that newspaper editors employ in determining the content of daily newspapers. In addition to individual systems discerning the best way to maximize customer satisfaction, TWC conducted over 60 subscriber preference and satisfaction projects in 1991 and 1992.

17. TWC cable operators continually refine their channel line-ups so as to increase subscriber satisfaction and appeal. Over 55 different program services are carried by at least one TWC cable system; it is estimated that there are no more than three program services that are carried by all TWC cable systems. In fact, the diversity of services offered can be quickly ascertained simply by comparing the channel line-ups of systems across the country. Where a particular program service is carried in all or virtually all TWC systems, it is because that service has demonstrated broad appeal to United States television audiences and is an economically attractive choice.

18. In addition to deciding which services to carry, TWC systems also decide how services are to be "packaged" for subscribers. In most TWC systems, subscribers can choose from among two or more packages or "tiers" of services, for which different prices are charged, and can also elect to purchase premium and pay-per-view services, for which additional charges are made. TWC systems typically offer a "basic" tier of services and an expanded or "standard" tier, which includes a large array of satellite-delivered programming services. Subscribers are usually required to purchase the expanded or "standard" tier in order to purchase premium or pay-per-view services. Premium services are often offered in discounted packages to subscribers who wish to purchase more than one such service. TWC personnel structure and fine-tune such programming tiers and packages based on judgments about local preferences similar to those described above with respect to the choice of individual program services.

19. TWC cable systems also exercise editorial discretion in determining the channel positions on which particular programming will be offered. In determining channel location, TWC personnel consider factors similar to those described above with respect to the choice of individual program service, and weigh those factors with channel accessibility. For a description of channel repositioning in one of TWC's Manahattan systems, see the accompanying Affidavit of Barry Rosenblum.

20. TWC's cable systems compete with a wide variety of alternate sources of news, information and entertainment. In particular, TWC's cable systems compete with broadcast television stations, which, unlike cable systems, offer their programming without direct charges to viewers. Despite this, however, local broadcasting stations achieve a very respectable profit. *See* John C. Severino, *Perspective on Television; No Cable Pie for the Networks' Sky*, L.A. Times, Jan. 27, 1992, B5 ("many local broadcast stations are still making profits in excess of 50 cents on the dollar") (attached hereto as Exhibit A).

21. Although TWC's cable systems compete with broadcast television stations, it is important to note that the cable industry is different from the broadcasting industry. There are no physical limitations on the ability to construct multichanel video distribution systems equivalent to the physical scarcity of the broadcast spectrum.

22. TWC's cable systems also compete with other non-broadcast means of delivering video programming to consumers, including satellite master antenna television ("SMATV") systems, in which apartments in a multiple dwelling unit ("MDU") are connected to a group of antennas capable of receiving satellite-delivered program services that are located on the premises (some SMATV systems use microwave relays to connect multiple MDU's to a single group of satellite receiving antennas); multipoint distribution service ("MDS") or multichannel multipoint distribution service ("MMDS"), often called "wire-

less cable", which deliver one or multiple channels of programming to subscribers by means of terrestrial microwave antennas; home satellite dishes ("TVROs"), which enable their owners to receive a vast array of programming services that are transmitted by satellite, either through a subscription agreement, arranged directly with the programmers or indirectly through any of a large number of program packagers, or, in many instances, free of charge; and video cassettes and video disks, which consumers may rent or buy for viewing on their television sets in conjunction with video cassette players. TWC's cable systems also compete with radio, especially in the provision of music, and with all these media and commercial broadcast television stations for advertising.

23. In addition, TWC's cable systems compete with the traditional print media, especially in the provision of news. Cable television is an electronic publisher which has become a vital, if not primary source for the public of news, opinion, and other information. As of the end of August, 1992, cable passed 95.9% of all homes in the country; 61.7% of these homes, or 54.9 million homes, subscribed. *The Kagan Media Index*, September 28, 1992, at 6-7 (attached hereto as Exhibit B). Cable networks, such as CNN, have assumed great importance to the public in its daily receipt of national and international news. *See, e.g.*, Jay Rose, *The Whole World is Watching CNN*, 252 The Nation 622 (1991) ("For Americans with cable, CNN serves as a video wire service, offering constant updates on the news. It's also an instant delivery system for dramatic footage from around the globe.") (attached hereto as Exhibit C). CNN's coverage of the Persian Gulf War is a striking example in this regard. Cable also often serves as an immediate source of newsworthy local information. As discussed above, TWC produces local news programs in New York City and Ithaca and Rochester, New York, among other places.

24. One way in which TWC addresses this broad range of competition, is to regularly schedule "free previews" of premium cable services. During such previews, TWC offers a premium cable service for a limited period at no charge to cable subscribers who do not subscribe to that premium service. TWC has found that free previews are an important factor in persuading subscribers to add premium services to their cable package. They are a valuable marketing tool for TWE as both cable system operator and cable programmer because they allow subscribers to actually view, free of charge, the programming they would receive if they subscribed to a particular premium service.

The 1992 and 1984 Cable Acts

25. The Cable Television Consumer Protection and Competition Act of 1992 (the "1992 Cable Act") amends the 1984 Cable Act, which had in many respects deregulated the cable industry. In so doing, its reestablishes government regulation that pre-dates the 1984 deregulation. The 1992 Cable Act, however, also goes further. It establishes a broad new regime of federal and local regulation that will, if allowed to stand, destroy the phenomenal development of new programming services. In essence, the second wave of the video revolution could be undone.

* * * *

February 11, 1993

/s/ Joseph J. Collins
JOSEPH J. COLLINS

[Jurat Omitted]

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.K

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Dated: May 26, 1995

[Exhibit 232]

The Cable Television Industry: New Technologies, New Opportunities and New Competition

Volume I: Industry Review and Outlook

Richard Bilotti, Jr.

Drew Hanson

Richard J. MacDonald, CFA

March 8, 1993

GRANTCHESTER SECURITIES

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* * * *

base will decline by as much as 2-7% per year in competitive areas. In contrast, non-competitive areas should continue to achieve at least 2.5% annual subscriber growth. It should be noted that our models do not attempt to determine if an enhanced array of services will increase subscriber demand for the existing cable television service or the services of new entrants. The models of the areas subject to telephone industry competition and DBS competition both assume that the new entrant initially prices its standard service package (basic service plus one premium service) at a 20% discount to the existing cable operator's standard service package (including expanded basic service where available). There is, however, one important distinction among the two competitive models. The DBS model assumes that the satellite system is fully functional by 1995. Therefore, the largest shifts of subscribers from cable television to DBS occur in 1995-1996. In later years, the growth rate for DBS declines. The telephone industry competitive model forecasts an accelerating rate of deployment of fiber to the curb video delivery systems. As a result, the largest shifts of subscribers from cable television to the telephone industry's systems will probably occur in 1999-2000.

We estimate that total subscription revenues will advance 2.6-4.2% in 1995-2000. In 1995-1997, 2.0-2.5% increases in monthly total subscription revenue per subscriber should augment modest subscriber gains. In 1998-2000, slightly higher increases in monthly total subscription revenue per subscriber should offset slight declines in the cable television industry's subscriber base. Our forecasts of the rates for basic service, expanded basic service, premium services, and ancillary services are based on the division of the cable television industry into the same three segments described above. Advertising revenues are derived from a separate model.

Increases of basic service and expanded basic service rates in competitive areas probably will be limited to a

combined 1.3-2.2% annually. Exhibit 52 provides our forecast for areas affected by competition from telephone companies and DBS. In both segments we anticipate that the cable television industry in aggregate will restrict rate increases so that the cost of its standard basic service package (basic service, expanded basic service, and one premium service) is about 110% of the competitor's standard service package by 2000. From another perspective, nearly flat rates for the cable television will narrow the discount provided by the new entrant from 20% in 1995 to 10% in 2000. Our forecast is based on the industry average. We anticipate that various operators will have significantly different rate strategies. In non-competitive areas (Exhibit 53), we expect that the combined cost of basic and expanded basic service will increase about 5.0% annually. As with the forecast for 1993-1994, regulations will limit basic rate hikes to about 3% each year. However, wider use of expanded basic service and higher rates for this tier will more than double the expanded basic service revenue per basic subscriber between 1995 and 2000.

Ancillary revenues should be subject to the same competitive pressures that influence basic service revenues and expanded basic service revenues. Premium service revenues may be affected by two trends. The possible declines in basic subscribers will almost undoubtedly lead to a loss of premium subscriptions by the cable television industry. In addition, premium service revenues will be cannibalized by the new pay-per-view services of the cable television industry and its competitors. Pay penetration should drop from 72.6% of basic subscribers in 1994 to 50-52% by the end of the decade. Total premium subscriptions are projected to fall from 42.3 million in 1994 to approximately 30.0 million in 2000, despite a retreat in the average rate of a premium channel from $10.00 to $9.11 (Exhibits 47 and 48). In aggregate, the decline of premium service revenues is equal to about 25% of the increase in pay-per-view revenues.

Local advertising revenue is an exceptional incremental revenue opportunity for the cable television industry. We expect that cable television advertising will advance by 20-

* * * *

30% per year. Exhibits 54-57 illustrate the models used to predict cable television advertising. The models do not attempt to determine the possible negative affects on the broadcast television industry from modern video delivery systems with massive channel capacity. Instead, the models apply a 6.0-8.0% compound rate of growth to total television advertising in 1994-2000. We believe that this is a fairly conservative growth rate.

We expect that the aggregate full day audience share (the average percentage of the homes using television that are watching a source of programming) of the cable television networks will increase from 25.1% in 1992 to 32-33% in 2000. Most of the new audiences will be at the expense of the broadcast networks and their affiliates. The share for these entities should drop from 50.0% in 1992 to 43-44% in 2000. The shift will be especially apparent in the homes that subscribe to cable television. The aggregate full day share of the cable networks in homes that subscribe to cable television should increase from 37.7% in 1992 to 51-52% in 2000. Our forecast of the aggregate audience share of the cable television networks represents the gradual deceleration of a trend which has become vividly apparent in recent years (Exhibits 12-15 and 54-57).

Television advertising is priced according to a myriad of variables. Amongst the most important is the price of a one minute advertisement per 1000 viewers delivered (also known as a CPM). The twin factors of increasing total revenues and lower audience shares should expand the broadcast network CPM by 4.6% per year in 1995-2000 (Exhibit 56). During the same period, the combined CPM for broadcast local and national spots will probably advance at the same rate.

The cable television networks give their affiliated systems (i.e., systems with carriage contracts) approximately three minutes of local advertising slots per hour. The system operator keeps all of the revenue from the sale of the slots. Our forecast of local cable television advertising is equal to the aggregate average audience for the cable television networks times the number of local slots per year (3 per hour × 24 hours × 365 days) times a target CPM. We expect that the average CPM for a local cable television advertisements will improve from about 20% of the broadcast local CPM in 1992 to about 45% in 2000.

Traditionally, local cable operators have not taken full advantage of local advertising sales. Getting into the business of selling local advertising time has been cheap; it does not require a substantial capital investment. Most of the costs are variable—commissions, office space, etc. But so far, the problem has been small audiences and a lack of demographic research. However, the size of the viewing audience is increasing dramatically. If the industry learns to package together several slots, then the potential audience size becomes very competitive for advertisers that need large audiences. By the end of the decade, we estimate that 10.0 million homes will be watching cable television at any given moment. With the possible constraints on basic revenue and subscriber growth, it would seem likely that the cable television industry will dramatically improve its efforts to sell advertising.

Pay-Per-View Programming—The Benefits of Digital Compression

We estimate that the cable television industry's pay-per-view programming revenues will experience a more than twelve-fold increase in the next eight years, from $625 million in 1992 to $7.5-7.6 billion in 2000 (Exhibit 49). The average growth rate for pay-per-view revenues

during this period will be approximately 37%. We define total video programming revenue as total subscription revenues, plus pay-per-view revenues. We do not include PCS revenues in total video revenue. In 1993 and 1994, total video programming revenues should increase 6.0-6.4% per year as compared to a 5.6-5.7% pace for total subscription revenues (which exclude pay-per-view revenues). In 1995-2000, we expect that total video programming revenues will achieve a 6.6% growth rate, more than double the

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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.K

Dated: May 26, 1995

* * * *

[Exhibit 247]

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BEST AVAILABLE COPY

CABLE TV ADVERTISING

MSOs embrace ad sales.....p.
1st qtr. viewing shares...p.
Ad avails at 30 networks..p.
Clocking local ad breaks..p.
Cable nets boost billings.p.

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PAUL KAGAN ASSOCIATES, INC.
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CARMEL, CALIFORNIA 93923-8734
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No. 217
June 22, 1993

The allure of local advertising sales shines brighter than ever ... cable's reregulated new world.

Local advertising joins premium TV, pay-per-view, digital audio, alternate access and a-la-carte services in the ranks of unregulated revenue streams. But the ad business goes one better than the rest--its success doesn't depend directly on subscribers digging deeper into their pocketbooks.

Local/spot cable ad revenue accounts for nearly 5% of total MSO revenue today and is on course to reach 6% by 1996, according to exclusive PKA projections (see table below).

A more important measure, however, may be ad sales as a percentage of basic/tier subscription revenue--about 7% at present, but expected to double to 14% over the next eight years.

Facing rate regulation on basic/tier offerings, cable operators will seek to squeeze every ounce of local ad sales value from these "locomotives," spared from placement on the digital a-la-carte tier and selected to drive penetration of the main cable programming package to 85%-95%.

Tele-Communications, Inc., the nation's top MSO, recently announced an ambitious two-year plan to launch ad sales ops in each of its systems, and to insert spots on every ad-supported net it carries. The goal: to more than triple current TCI ad sales of about $200 mil./yr. and less than $20/sub.

LOCAL/SPOT AD REVENUE AS A % OF TOTAL MSO REVENUE

Year	*Local/ Spot Ad Revenue** (mil.)	*Basic/Tier Subscription Revenue* (mil.)	*Total Operator Revenue* (mil.)	*--Ad Revenue as % of--* Basic Rev.	Total Rev.
1980	$ 8	$ 1,615	$ 2,549	0.5%	0.3%
1985	167	4,145	8,938	4.0	1.9
1990	634	10,169	17,855	6.2	3.5
1991	710	11,414	19,473	6.2	3.6
1992	872	13,261	20,607	6.6	4.2
1993	1,064	13,974	22,023	7.6	4.8
1994	1,256	13,664	22,802	9.2	5.5
1995	1,456	14,543	25,195	10.0	5.8
1996	1,660	15,445	27,776	10.7	6.0
1997	1,876	16,384	30,764	11.4	6.1
1998	2,101	17,357	34,551	12.1	6.1
1999	2,332	18,377	38,843	12.7	6.0
2000	2,589	19,456	43,379	13.3	6.0
2001	2,874	20,596	47,816	13.9	6.0
2002	3,161	21,791	52,692	14.5	6.0

** Gross billings. © 1993 Paul Kagan Associates, Inc., estimates.*

C0023970

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CABLE VIEWING SHARES COULD HIT NEW HIGH IN 1993

If the 1st quarter viewing share trends are any indication of the rest of the year--and history says they are--basic networks should wind up 1993 with a 35-36 share of all viewing in cable homes, up two share points from 1992.

Ironically, both cable and broadcasters wound up gaining viewers in the 1st quarter--basic ratings were up 4.3% while broadcasters were up 2.7%--but the broadcast gains were mostly the result of a strong showing by Fox and a 3% increase in TV usage levels (which means more viewing to spread around).

The three old-line broadcast networks continue to hit new lows in viewing share--dropping to a 53 share in all TV households in the 1st quarter--down from a Winter Olympics-boosted 55 in the same period in 1992, and below the 54 share in 1991.

FIRST QUARTER VIEWING SHARE COMPARISON ('92-'93)
(In All Cable Homes)

	---Share---		---Rating---		% Rating
	1992	*1993*	*1992*	*1993*	*Change*
Basic Networks	34	36	11.4	12.1	6.1%
Pay Services	8	7	2.6	2.4	(7.7)
Tot. Cable	42	43	14.0	14.6	4.3
ABC	15	16	5.0	5.5	10.0
CBS	18	16	5.8	5.6	(3.4)
NBC	15	15	4.9	5.0	2.0
FOX	8	8	2.5	2.8	12.0
Tot. Affiliates	56	55	18.3	18.8	2.7
Independents	9	9	2.9	2.9	0.0
Public TV	2	3	0.8	0.9	12.5
Tot. Broadcast TV	67	67	22.0	22.6	2.7%
Total TV Usage	---	---	33.1	34.1	3.0%

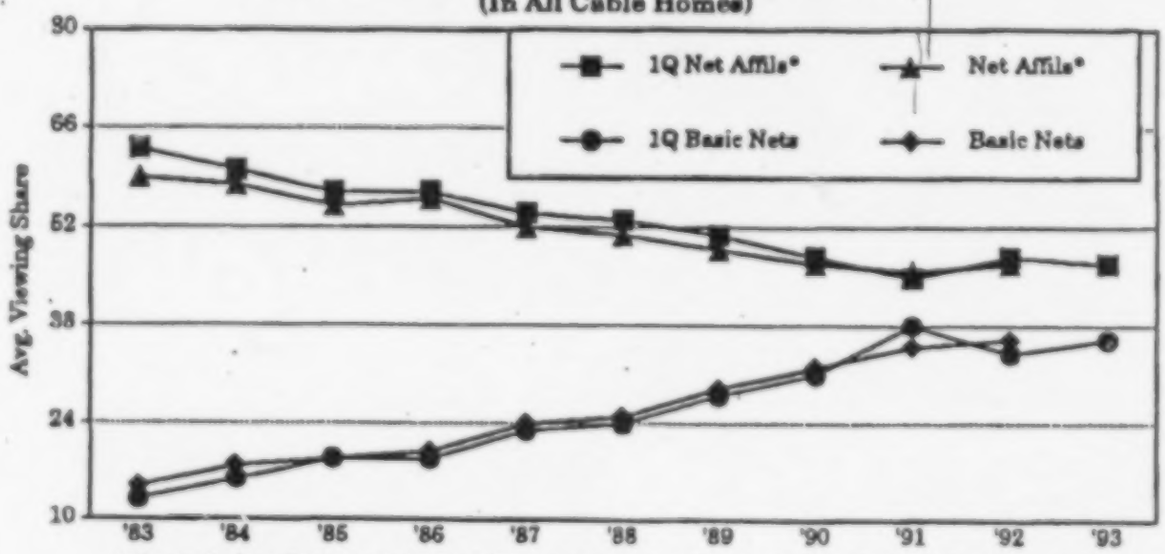
© 1993 Paul Kagan Associates, Inc. analysis of Cabletelevision Advertising Bureau-compiled A.C. Nielsen data.

Much of the damage to the broadcasters is fratricidal, as evidenced by the fact ABC/CBS/NBC have been steadily losing shares in non-cable homes over the last ten years, with viewing shifting to Fox, non-affiliated indies and even to public TV (P. 3).

By this time next year, however, both incumbent basic networks and brcstrs. may be looking over their shoulders as a new generation of cable networks--designed for the new digital tiers--enters the hunt for carriage and viewers.

At the recent NCTA National Show, we counted more than 50 new proposed channels, ranging from ESPN 2 (set to launch 11/2) to a seven-channel multiplex from Encore, a minipay service.

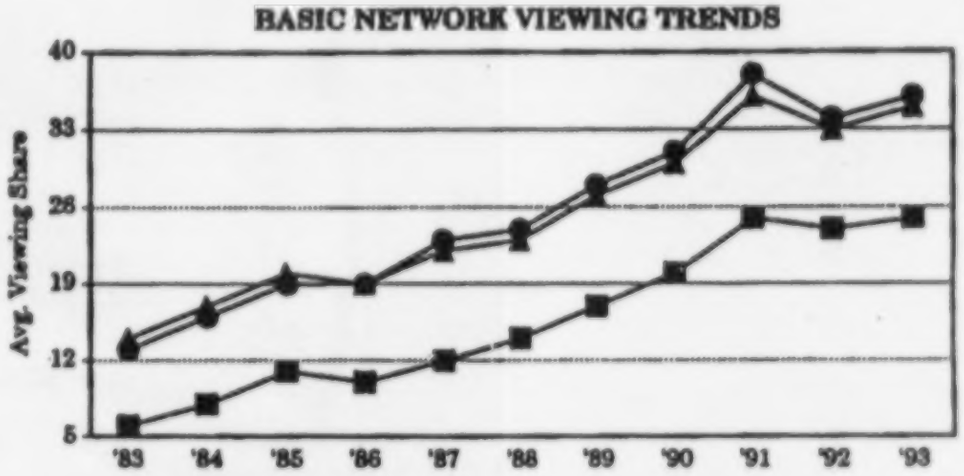
FIRST QUARTER VS. FULL YEAR VIEWING TRENDS
(In All Cable Homes)

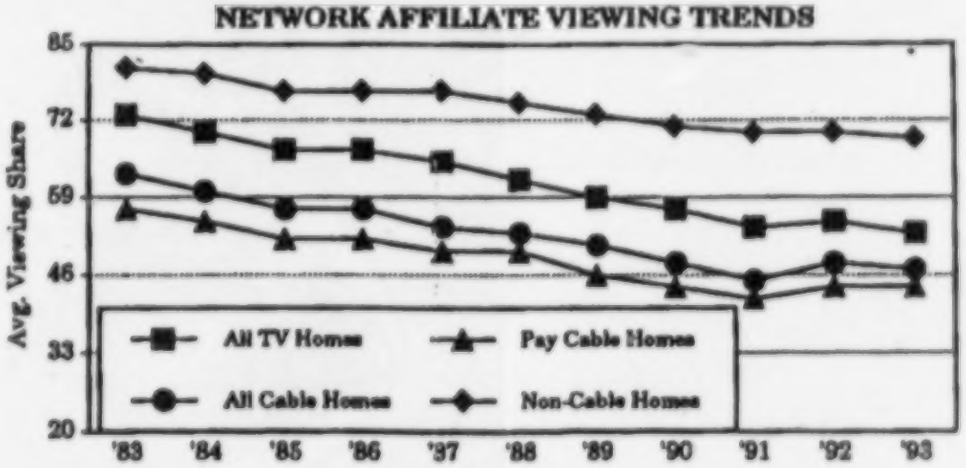


**Not including FOX. © 1993 Paul Kagan Associates, Inc. analysis of Cablevision Advertising Bureau compilation of A.C. Nielsen data.*

TELEVISION VIEWING SHARE TRENDS (1983-1993)

	First Quarter										
	83	*84*	*85*	*86*	*87*	*88*	*89*	*90*	*91*	*92*	*93*
ALL TV HOMES											
Ntwk. affiliates	73	70	67	67	65	62	59	57	54	55	53
Cable networks	6	8	11	10	12	14	17	20	25	24	25
Independents*	18	18	19	18	18	20	20	20	19	20	21
Pay services	5	5	5	6	6	6	6	6	6	5	5
Public stations	3	3	4	4	4	4	4	3	3	3	4
ALL CABLE HOMES											
Ntwk. affiliates	63	60	57	57	54	53	51	48	45	48	47
Cable networks	13	16	19	19	23	24	28	31	38	34	36
Independents*	17	17	17	17	18	17	16	15	14	16	17
Pay services	11	10	10	9	8	10	10	10	8	8	7
Public stations	3	3	3	3	3	3	3	3	2	2	3
PAY CABLE HOMES											
Ntwk. affiliates	57	55	52	52	50	50	46	44	42	44	44
Cable networks	14	17	20	19	22	23	27	30	36	33	35
Independents*	18	17	17	18	16	16	16	15	15	16	16
Pay services	16	16	16	15	16	17	18	18	16	16	15
Public stations	3	3	3	3	3	3	2	2	2	2	2
NON-CABLE HOMES											
Ntwk. affiliates	81	80	77	77	77	75	73	71	70	70	69
Independents	19	20	22	19	19	22	22	23	24	29	29
Public stations	4	4	5	4	5	5	5	5	5	5	6





** Historical superstation shares have been equally split between cable networks and independents. Indie shares include Fox affiliates. © 1993 Paul Kagan Associates, Inc. analysis of Cabletelevision Advertising Bureau-compiled A.C. Nielsen data.*

BASIC NETWORK LOCAL AD AVAILS: 2 MIN./HOUR STILL THE NORM

The ad avails mix at the typical basic cable service remains approximately four minutes of national network breaks for every minute of local commercials, according to an exclusive annual PKA study (see table below).

This less-than-generous split for local/spot ad sellers is unlikely to change until national spot advertisers begin committing serious dollars to cable. (By serious, we mean $500+ mil. annually, versus a projected $165 mil.-$170 mil. in 1993.) Pressure on programmers to offer ad-inserting affiliates more than the standard two minutes/hour of local avails will be most intense in the top 10 TV markets, as regional interconnects seek additional inventory on top-selling nets such as ESPN, CNN and USA, to satisfy spot buyers' gross-ratings-points demands.

Another service with strong local ad sales appeal, TNT, averages three minutes/hour of local avails. Most of the three min./hour club, however, is comprised of newer services with limited local ad-insertion activity (The Box, Comedy Central, Court TV, Sci-Fi Channel, The Travel Channel).

Although basic nets failed to provide more local avails during the past year, most at least resisted the temptation to boost national ad inventories. This followed two years of national avail hikes by several cable channels--making them easy targets for advertising agency complaints concerning commercial "clutter."

Weighted total avails for the 30 networks below grew by just 9% between 1992 and 1993. What's more, the increase was driven largely by a 7% gain in the average number of subscribers. (Ad inventory is weighted by dividing a network's subscriber count by total U.S. TV homes, then multiplying the resulting percentage by total avails.)

CABLE NETWORK ADVERTISING AVAILABILITIES
(in 30-second units)

	--30s/Hr.--		--------30s/Year--------			Avails % -- of total--		-------Subs-------			-----Weighted Total Avails-----			% Change	
Network	Local	Natl.	Local	Natl.	Total	Local	Natl.	4/91 (mil.)	4/92 (mil.)	4/93 (mil.)	1991* (000)	1992* (000)	1993* (000)	91-92	92-93
A&E	4	16	35,040	140,160	175,200	20.0%	80.0%	50.2	53.8	56.6	95.5	101.2	105.9	6.0%	4.7%
BET	4	28	35,040	245,280	280,320	12.5	87.5	30.6	33.5	35.2	58.2	63.0	106.4	8.3	67.2
The Box	6	12	52,560	105,120	157,680	33.3	66.7	13.0	13.9	14.0	14.8	18.3	23.6	23.7	28.8
Cartoon	4	16	35,040	140,160	175,200	20.0	80.0	---	---	.5.0	---	---	9.4	---	---
CMTV	4	15	35,040	131,400	166,440	21.1	78.9	13.2	16.1	19.6	25.1	31.8	34.9	26.5	9.8
CNBC (a)	6	18	52,560	157,680	210,240	25.0	75.0	18.9	45.9	48.5	43.1	114.5	109.0	165.8	(4.9)
CNN (b)	4	19	35,040	166,440	201,480	17.4	82.6	58.0	59.3	61.6	126.9	128.3	132.6	1.1	3.3
Comedy Central	6	16	52,560	140,160	192,720	27.3	72.7	12.5	24.0	27.9	26.2	49.7	57.4	89.6	15.6
Court TV	6	10	52,560	87,600	140,160	37.5	62.5	---	6.2	10.6	---	9.3	15.8	---	69.4

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CABLE AD AVAILS (continued from P. 4)

Network	--30s/Hr.-- Local	Natl.	--------30s/Year-------- Local	Natl.	Total	Avails % --of total-- Local	Natl.	-------Subs------- 4/91 (mil.)	4/92 (mil.)	4/93 (mil.)	Weighted -----Total Avails----- 1991* (000)	1992* (000)	1993* (000)	% Change 91-92	92-93
Discovery (c)	4	16	26,280	100,672	126,952	20.7%	79.3%	55.0	58.0	59.4	72.1	79.1	80.6	9.8%	1.9%
ESPN (d)	4	20	35,040	175,200	210,240	16.7	83.3	58.7	60.1	61.6	111.7	135.7	138.4	21.5	2.0
E! TV	4	20	35,040	175,200	210,240	16.7	83.3	18.5	20.0	21.5	25.8	45.2	48.3	75.1	6.9
FAM (e)	4	20	17,472	108,000	125,472	13.9	86.1	53.1	55.3	57.2	77.6	74.5	76.7	(4.0)	3.0
Headline News (f)	4	19	35,040	166,440	201,480	17.4	82.6	45.9	48.7	52.0	100.4	105.5	111.9	5.0	6.1
LIFE (c)	4	20	26,280	131,400	157,680	16.7	83.3	53.0	54.6	57.0	90.7	92.5	96.1	1.9	3.9
MTV	4	14	35,040	122,640	157,680	22.2	77.8	54.5	55.6	56.8	93.3	94.2	95.7	0.9	1.6
NICK (g)	2	12	10,220	60,590	70,810	14.4	85.6	54.6	56.9	58.8	42.0	43.3	44.5	3.0	2.8
Nick-At-Nite (h)	4	17	14,600	62,780	77,380	18.9	81.1	54.6	56.9	58.8	45.9	47.3	48.6	3.0	2.8
Nostalgia	4	20	35,040	175,200	210,240	16.7	83.3	12.3	13.9	14.7	27.8	31.4	33.0	13.0	5.2
Sci-Fi	6	16	52,560	140,160	192,720	27.3	72.7	---	---	11.0	---	---	22.6	---	---
TBS (i)	0	20	0	175,200	175,200	0.0	100.0	56.4	58.2	60.3	107.3	109.6	112.8	2.1	3.0
TLC	4	16	29,328	117,312	146,640	20.0	80.0	14.9	16.5	20.1	8.6	23.2	31.5	170.1	35.5
TNN (c)	4	20	26,208	131,040	157,248	16.7	83.3	53.2	55.3	57.3	06.3	93.4	96.3	(12.1)	3.1
TNT (j)	6	17	52,560	148,920	201,480	26.1	73.9	53.3	56.7	59.0	106.5	122.6	127.0	15.1	3.6
Travel	6	18	52,560	157,680	210,240	25.0	75.0	17.2	17.5	17.5	32.7	39.5	39.3	20.9	(0.5)
TWC	4	18	35,040	157,680	192,720	18.2	81.8	48.7	51.0	53.5	101.9	105.6	110.2	3.6	4.3
USA	4	18	35,040	157,680	192,720	18.2	81.8	56.7	59.0	60.6	118.6	122.1	124.9	3.0	2.2
VH-1	4	14	35,040	122,640	157,680	22.2	77.8	41.2	44.5	47.0	70.5	75.4	79.2	6.9	5.1
VISN/ACTS (k)	4	16	29,200	116,800	146,000	20.0	80.0	7.8	12.6	19.0	11.5	10.9	29.6	(5.0)	171.3
WOR (l)	16	4	43,680	35,040	78,720	55.5	44.5	14.0	14.5	13.5	---	11.2	11.4	---	1.7
Total/Avg.	5	17	1,046,708	4,052,274	5,098,982	20.5%	79.5%	34.0	37.3	39.9	1,741.0	1,978.2	2,152.5	13.6%	8.8%

*Notes: * Ad inventory is weighted by dividing a network's sub count by total TV homes (92.1 mil. in 1991, 93.1 mil. in 1992 and 93.6 mil. in 1993) and then multiplying the resulting percentage by total inventory. (a) Affils. still under FNN contracts receive four 30-sec. avails per hr. instead of six. (b) CNN affiliates also carrying TBS, TNT and Headline News can opt for two bonus CNN local 30-sec. avails per hour. (c) The network has an 18-hr./day schedule. (d) Avails split is 4 min. local, 8 min. natl. per hour during NFL telecasts. (e) FAM affiliates receive 336 min. of local ad avails/week; FAM doesn't carry commercials during 700 Club telecasts or religious programming. (f) HNews offers one additional 30-sec. local avail per half hour to systems carrying Local Edition. (g) Nickelodeon operates 6 a.m.-8 p.m., and runs 4 min./hr. of national avails. 9 a.m.-2 p.m. and 7 min./hr. the rest of the time. (h) Nick-At-Nite operates 8 p.m.-6 a.m. and runs 9 min./hr of national avails from 8 p.m. to 2 a.m. and 8 min./hr. from 2 a.m.-6 a.m. (i) TBS averages 20 30-sec. avails per hour except for sitcoms, which are cut in 24 units/hr. In the Atlanta market, TBS sells some avails to local and regional sponsors. (j) NFL games carry 4 min. of local ads per hour. NBA games offer two min. of local ads per hour. (k) No ad avails during worship service programming. (l) Local avails on Eastern Microwave inserted programming only.* *© 1993 Paul Kagan Associates, Inc. analysis of cable network data.*

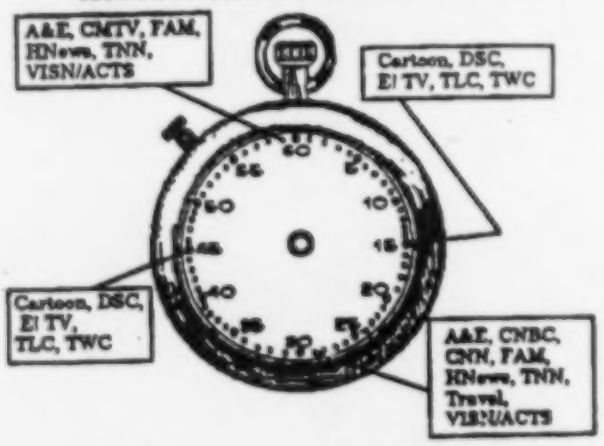
EXAMINING LOCAL BREAK TIMES

Besides securing more ad avails from basic networks, cable operators would like to see greater uniformity in local commercial break times, which now are scattered through the hour (see tables below).

Common local breaks would allow further experimentation with roadblocking, i.e., the simultaneous insertion of one commercial across several channels.

The practice can deliver aggregate basic ratings comparable with those of local TV stations, while exposing remote-control-grazing viewers to the same local spot as they surf across the dial.

MOST POPULAR LOCAL BREAK TIMES



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ONE-MINUTE LOCAL BREAKS BY NETWORK

Network	*Minute past the hour*		
A&E	:29	:59	---
BET	:28	:58	---
BOX	:14	:37	:57
Cartoon	:15	:45	---
CMTV	:22	:59	---
CNBC	:19	:29*	:49
CNN	:29#	:56	:57
Comedy Central	:23	:38	:53
Court TV@	:10	:50	:51
Court TV&	:10	:60	:01
Discovery	:15	:45	---
E! TV	:15	:45	---
ESPN	---varies---		---
FAM	:29	:59	---
Headline News	:29	:59	---
Lifetime	---varies---		---
MTV	:20	:50	---
Nickelodeon	:55	---	---
Nick-At-Nite	:20	:55	---
Sci-Fi	------varies------		
TLC	:15	:45	---
TNN	:29	:59	---
TNT	---varies---		---
Travel	:29	--varies--	
TWC	:15	:45	---
USA	---varies---		---
VH-1	:23	:53	---
VISN/ACTS	:29	:59	---
WOR	------varies------		

ONE-MINUTE LOCAL BREAKS BY MINUTE PAST THE HOUR

:01 Court TV (8P-9A)
:10 Court TV
:14 BOX
:15 Cartoon, DSC, E!, TLC, TWC
:19 CNBC
:20 MTV, Nick-At-Nite
:22 CMTV
:23 Comedy Central, VH-1
:28 BET
:29 A&E, CNBC, CNN, FAM, HNews TNN, Travel, VISN/ACTS
:37 BOX
:38 Comedy Central
:45 Cartoon, DSC, E! TV, TLC, TWC
:49 CNBC
:50 Court TV (9A-8P), MTV
:51 Court TV (9A-8P)
:53 Comedy Central, VH-1
:55 Nickelodeon, Nick-At-Nite
:56 CNN
:57 CNN, BOX
:58 BET
:59 A&E, CMTV, FAM, HNews, TNN, VISN/ACTS
:60 Court TV (8P-9A)

** This break is not available to affils still under FNN contracts. # Bonus avail. for affils carrying all Turner services. @ Local breaks between 9 a.m. and 8 p.m. & Local breaks between 8 p.m. and 9 a.m.*

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CABLE BILLINGS TRACKING AHEAD OF VIEWING GAINS

Cable network billings growth slowed a bit in April but the largest networks are still on track to see combined billings grow 11%-13% in 1993. The Turner networks are on a particularly torrid pace: according to Arbitron's MediaWatch service, TNT billings were up 51% in April (over the same month in 1992), CNN is up 18% and even venerable TBS is up 14%. Not to be outdone, MTV was up 32% and Lifetime (which is not part of the tracking below) was up 43%.

The gains come against a 6.1% rise in ratings for the basic networks in the first quarter (see p. 2-3). Combine that with an overall 3%-4% increase in cable household coverage and it looks like all Madison Ave. is doing is paying cable for its net viewer gains plus a couple of points for inflation.

The gap between cable and broadcast rates remains as wide as ever. That is cable's curse and blessing. It means cable billings have the potential to grow at double digit rates for years to come without cable and broadcast reaching parity.

MONTH-TO-MONTH CABLE NETWORK BILLINGS TRACKING*

	Gross Network Billings*									Change							
	1985 (mil.)	1986 (mil.)	1987 (mil.)	1988 (mil.)	1989 (mil.)	1990 (mil.)	1991 (mil.)	1992 (mil.)	1993 (mil.)	85-86	86-87	87-88	88-89	89-90	90-91	91-92	92-93
January	$31.3	$35.5	$37.2	$46.3	$58.8	$74.8	$86.0	$85.8	$88.8	13.5%	4.8%	24.4%	27.1%	27.3%	15.0%	-0.3%	3.5%
February	31.8	39.0	42.4	55.4	70.9	82.3	92.6	93.9	103.9	22.7	8.9	30.5	27.9	16.1	12.6	1.4	10.6
March	44.1	47.6	52.8	52.2	86.5	98.5	105.4	100.5	122.5	8.0	11.0	(1.2)	65.7	13.9	7.0	-4.6	21.9
April	40.6	45.2	49.2	59.2	75.4	84.9	99.6	110.8	119.9	11.4	8.8	20.3	27.4	12.5	17.3	11.2	8.2
May	43.7	58.2	54.7	68.2	94.9	104.7	113.3	118.8	---	33.3	(6.0)	24.5	39.3	10.3	8.2	4.8	---
June	40.3	43.9	50.0	51.3	75.2	85.1	94.6	90.2	---	8.8	14.0	2.6	46.4	13.3	11.2	-4.7	---
July	35.9	39.6	47.0	52.6	63.2	82.4	84.9	104.1	---	10.2	18.6	11.9	20.2	30.5	3.0	22.5	---
August	38.1	42.6	48.6	69.3	79.7	94.6	99.1	102.9	---	11.9	14.0	42.6	15.1	18.6	4.8	3.8	---
September	44.5	47.7	55.9	64.7	82.9	93.8	102.5	129.3	---	7.0	17.4	15.7	28.0	13.2	9.3	26.2	---
October	38.5	44.6	53.4	65.6	79.3	97.7	104.5	131.2	---	15.7	19.7	23.0	20.9	23.2	6.9	25.5	---
November	46.5	52.2	65.6	95.1	109.3	119.9	124.3	142.5	---	12.2	25.7	45.1	14.9	9.7	3.6	14.7	---
December	43.5	47.0	50.4	72.7	79.9	93.8	107.7	136.3	---	8.1	7.2	44.3	9.9	17.3	14.8	26.5	---
YTD	$147.7	$167.3	$181.7	$213.1	$291.6	$340.5	$383.7	$391.0	$435.1	13.3%	8.6%	17.3%	36.9%	16.8%	12.7%	1.9%	11.3%
Net Gain	---	$19.6	$14.4	$31.4	$78.5	$48.9	$43.2	$7.3	$44.1	---	---	---	---	---	---	---	
Tot. year	$479	$543	$607	$753	$956	$1,113	$1,215	$1,346	---	13.4%	11.8%	23.9%	27.0%	16.4%	9.2%	10.8%	---
Net Gain	---	$64.3	$64.2	$145.4	$203.4	$156.6	$102.1	$131.5	---	---	---	---	---	---	---	---	---

** Includes CNN, ESPN, FAM, MTV, TBS & USA.*

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CABLE NETWORK CENSUS: MAY

Network	Subscribers 5/31/92 (mil.)	Subscribers 5/31/93 (mil.)	% Chg.	Affiliates 5/31/92	Affiliates 5/31/93	% Chg.
ESPN	60.5	61.1	+ 0.9	25,104	26,288	+ 4.7
CNN	59.6	61.0	+ 2.3	14,558	19,514	+ 34.0
USA	59.0	60.1	+ 1.8	10,100	12,000	+ 18.8
TBS	58.7	60.0	+ 2.3	14,600	18,570	+ 27.2
C-SPAN	56.8	59.3	+ 4.4	4,175	4,410	+ 5.6
Discovery	58.0	59.2	+ 2.0	9,498	9,818	+ 3.4
TNT	57.0	58.9	+ 3.2	9,217	10,997	+ 19.3
Nickelodeon	57.4	58.5	+ 1.9	9,168	9,828	+ 7.2
MTV	56.1	56.6	+ 1.0	7,776	8,320	+ 7.0
FAM	55.8	57.3	+ 2.7	9,968	10,133	+ 1.7
TNN	55.7	57.3	+ 2.9	12,870	13,427	+ 4.3
Lifetime	55.3	56.8	+ 2.8	9,200	11,550	+ 25.5
A&E	54.3	56.4	+ 3.9	7,737	8,695	+ 12.4
Weather	51.6	53.5	+ 3.7	4,725	5,430	+ 14.9
Headline News	49.2	51.6	+ 4.9	6,661	10,934	+ 64.1
CNBC	46.7	48.5	+ 3.7	3,394	3,500	+ 3.1
VH-1	44.9	47.0	+ 4.8	4,814	5,403	+ 12.2
QVC	42.9	46.0	+ 7.4	4,122	4,499	+ 9.1
AMC	39.5	45.0	+ 13.9	3,100	5,400	+ 74.2
WGN-UVI	38.1	38.1	0.0	14,354	14,327	- 0.2
BET	33.7	35.8	+ 6.2	1,967	2,374	+ 20.7
Prevue Guide	27.9	31.4	+ 12.4	980	1,121	+ 14.4
C-SPAN II	27.6	30.7	+ 11.2	887	1,041	+ 17.4
Comedy Central	24.5	28.1	+ 14.8	2,270	2,725	+ 20.0
Mind Extension Univ.	18.5	23.2	+ 25.7	581	800	+ 37.7
E! Entertainment TV	20.0	22.0	+ 10.0	800	1,060	+ 32.5
Learning	16.9	20.0	+ 18.4	1,351	1,594	+ 18.0
Country Music TV	16.1	19.7	+ 22.4	4,397	4,937	+ 12.3
VISN/ACTS	12.8	19.0	+ 48.4	728	1,278	+ 75.5
Travel	17.5	17.5	0.0	735	735	0.0
Sneak Prevue	3.3	15.4	+369.9	116	389	+235.3
Nostalgia	13.9	14.7	+ 5.8	683	763	+ 11.7
WWOR	14.5	14.5	0.0	1,700	1,700	0.0
The Box	14.0	14.0	0.0	170	148	- 12.9
Sci-Fi	---	11.0	---	---	360	---
Court TV	6.3	10.7	+ 71.2	607	675	+ 11.2
Bravo	8.5	10.5	+ 23.5	475	500	+ 5.3
WPIX	9.5	9.7	+ 2.1	638	637	- 0.2
QVC Fashion	7.2	7.5	+ 3.7	464	400	- 13.8
Cartoon	---	5.9	---	---	559	---
KTLA	5.2	5.5	+ 5.8	324	343	+ 5.9
International	3.2	4.5	+ 41.9	82	130	+ 58.5
Galavision	3.9	4.3	+ 10.6	260	300	+ 15.4
KTVT	2.3	2.4	+ 4.3	486	501	+ 3.1
Fox Net	1.3	2.0	+ 52.1	492.0	717	+ 45.7

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CABLE TV ADVERTISING DATA ROUNDUP--June 22, 1993

TOP 10 CABLE ADVERTISERS (First Three Months)

Advertiser	1992*	1993#	% Chg.
1 Procter & Gamble Co.	$ 21,407,279	$ 36,541,711	70.7%
2 General Motors Corp.	8,100,945	14,128,257	74.4
3 Phillip Morris Companies	6,801,476	13,507,213	98.6
4 American Express Co.	2,619,926	12,915,014	393.0
5 Anheuser Busch	7,708,381	8,596,829	11.5
6 American Home Products	5,662,816	7,787,670	37.5
7 Chrysler Corp.	2,837,963	7,743,774	172.9
8 Kellogg	3,441,669	7,645,171	122.1
9 Hasbro	2,061,315	7,196,946	249.1
10 AT&T	7,357,888	7,135,337	-3.0
Totals	$ 67,999,658	$123,197,922	81.2%

TOP 10 CABLE AD PRODUCT CATEGORIES (First Three Months)

Product Category	1992*	1993#	% Chg.
1 Financial Services	$ 4,353,179	$ 20,858,358	379.2%
2 Restaurants & Drive-Ins	9,455,977	18,434,925	95.0
3 Passenger Cars, Imported	7,750,755	16,676,863	115.2
4 Candy & Gum	11,551,195	15,629,595	35.3
5 Cereal	8,837,651	14,519,489	64.3
6 Passenger Cars, Domestic	7,170,898	14,396,561	100.8
7 Games/Toys/Hobbies/Crafts	4,175,505	12,457,530	198.3
8 Long Distance Services	8,109,045	10,536,041	29.9
9 Beer & Ale	8,360,842	9,511,383	13.8
10 Trucks & Other Vehicles	4,867,426	9,480,977	94.8
Totals	$ 74,632,473	$142,501,722	90.9%

Note: * *Figures reflect combined spending on ESPN, USA, TBS, CNN, MTV and FAN.*
 # Figures reflect combined spending on the afore mentioned six networks, plus Lifetime, TNT, Nickelodeon, Discovery, A&E and Headline News.
© *1993 Paul Kagan Associates, Inc. analysis of Arbitron's MediaWatch data.*

CABLE TV ADVERTISING DATA ROUNDUP, 6/22/93 (P. 2 of 2)

CABLE NETWORK CENSUS: APRIL

Network	Subscribers 4/30/92 (mil.)	Subscribers 4/30/93 (mil.)	Subscribers % Chg.	Affiliates 4/30/92	Affiliates 4/30/93	Affiliates % Chg.
ESPN	60.1	61.6	+ 2.5%	24,860	26,288	+ 5.7%
CNN	59.3	61.6	+ 3.9	14,510	19,432	+ 33.9
USA	58.8	60.6	+ 3.1	10,100	12,000	+ 18.8
TBS	58.2	60.3	+ 3.5	14,568	18,541	+ 27.3
Discovery	57.2	59.4	+ 4.0	9,411	9,779	+ 3.9
C-SPAN	56.6	59.2	+ 4.6	4,175	4,396	+ 5.3
TNT	56.7	59.0	+ 4.1	9,104	10,896	+ 19.7
Nickelodeon	56.9	58.8	+ 3.3	9,150	9,793	+ 7.0
MTV	55.6	58.6	+ 5.4	7,757	8,269	+ 6.6
TNN	55.3	57.3	+ 3.6	12,842	13,396	+ 4.3
FAM	55.3	57.2	+ 3.6	9,906	10,116	+ 2.1
Lifetime	54.8	57.0	+ 4.1	8,800	11,550	+ 31.3
A&E	53.8	56.6	+ 5.2	7,664	8,700	+ 13.5
Weather	51.0	53.5	+ 4.9	4,700	5,430	+ 15.5
Headline News	48.7	52.0	+ 6.6	6,595	10,970	+ 66.3
CNBC	45.9	48.5	+ 5.6	3,348	3,503	- 4.6
VH-1	44.5	47.0	+ 5.6	4,785	5,377	+ 12.4
QVC	42.8	45.9	+ 7.4	4,124	4,444	+ 7.8
AMC	39.0	44.2	+ 13.3	3,000	4,100	+ 36.7
WGN-UVI	38.1	38.1	0.0	14,354	14,220	- 0.9
BET	33.5	35.2	+ 5.1	2,500	2,859	+ 14.4
Prevue Guide	28.0	31.1	+ 11.1	980	1,120	+ 14.3
C-SPAN II	27.4	30.5	+ 11.3	885	1,033	+ 16.7
Comedy Central	24.0	27.9	+ 16.2	2,221	2,707	+ 21.9
Mind Extension Univ.	18.2	23.2	+ 27.4	580	800	+ 37.9
E! Entertainment TV	20.0	21.5	+ 7.5	800	950	+ 18.8
Learning	16.5	20.1	+ 22.1	1,302	1,586	+ 21.8
Country Music TV	16.1	19.6	+ 21.7	4,230	4,887	+ 15.5
VISN/ACTS	12.6	19.1	+ 51.6	716	1,273	+ 77.8
Travel	17.5	17.5	0.0	735	700	- 4.8
Sneak Prevue	3.2	14.7	+354.2	101	370	+266.3
Nostalgia	13.9	14.7	+ 5.8	683	763	+ 11.7
WWOR	14.5	14.5	0.0	1,700	1,700	0.0
The Box	13.9	14.0	+ 0.7	172	149	- 13.4
Sci-Fi	---	11.0	---	---	360	---
Bravo	8.0	10.5	+ 31.3	450	500	+ 11.1
WPIX	9.5	9.7	+ 2.1	638	637	- 0.2
Court TV*	6.2	9.4	+ 51.6	605	675	+ 11.6
QVC Fashion	7.2	7.6	+ 4.5	464	408	- 12.1
Cartoon	---	5.7	---	---	542	---
KTLA	5.2	5.5	+ 5.8	324	343	+ 5.9
Galavision	3.6	4.3	+ 21.1	256	300	+ 17.2
International	3.2	4.2	+ 32.5	82	126	+ 53.7
KTVT	2.3	2.4	+ 4.3	486	501	+ 3.1
Fox Net	1.3	2.0	+ 51.6	473.0	716	+ 51.4

Note: * *April numbers unavailable (March used).*

© *1993 Paul Kagan Associates, Inc. analysis of cable network data.*

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.M

* * * *

Dated: May 26, 1995

[Exhibit 292]

Date: 6/25/93

To: Lynn Yaeger
Jimmy Doolittle
Jim Gray
Kevin Laddy

cc: Jim Chiddix
Dave Pangrae
Mike Hayashi

From: Walt Ciciora, 203/328-0622
Fax: 203/326-0690
Voice Mail: 800/888-5523 ext. 655

Re: A/B Switches

This is a cautionary note on the difficulties which may arise from the improper use of A/B switches or the use use of inadequate A/B switches. This should not be interpreted to mean that we shouldn't use A/B switches, just that we must be careful.

* * * *

Yet one further nasty complication is possible. Some "modern" TV's and VCR's automatically set themselves up by scanning the channels at the tuner input and memorizing the occupied channels. Some of the RCA TV's in our offices behave this way. The problem with this approach is that it can take several minutes. It has to be repeated on some TV's each time the A/B switch is moved from one position to another when the broadcast channel is in the UHF band since the frequencies assigned to cable channel numbers are not all the same as those assigned to broadcast channel numbers. This can be very unpleasant!

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME II

* * * *

May 26, 1995

[Exhibit 25]

[NAB Logo]

TV TODAY

July 19, 1993

More Than 90% Of Affiliates Choose Retransmission Consent

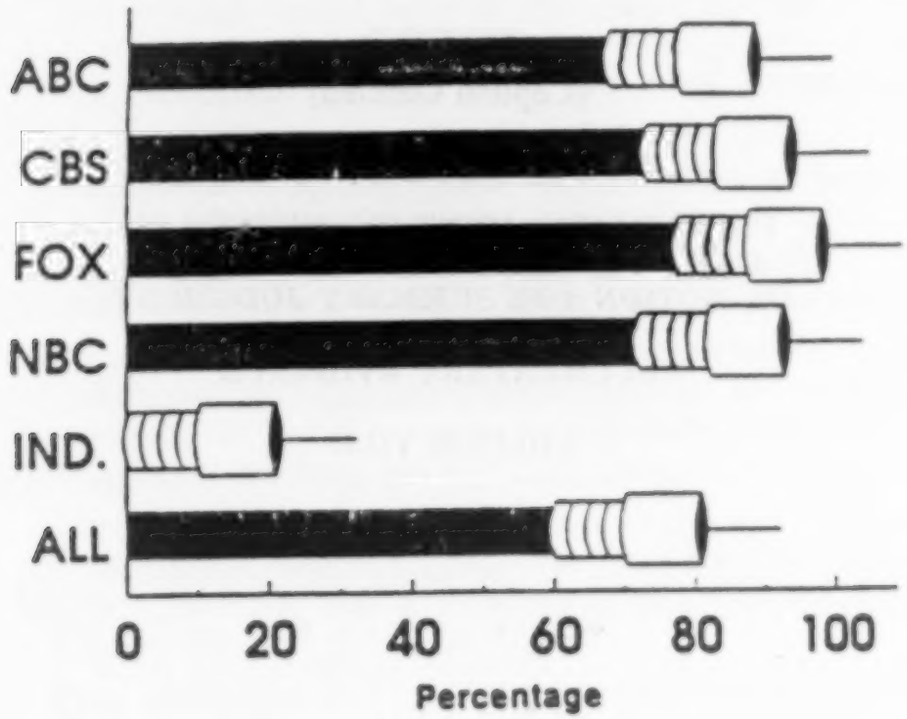
More than 90% of network affiliate stations have opted to negotiate for retransmisison consent with at least one cable system in their ADI, according to an NAB survey. Of all TV stations, including independents, 80.3% said they will seek retransmission consent agreements with at least one cable operator in their ADI.

By network, 89.5% of all ABC affiliates will ask for retransmisison consent agreements with at least one cable system in their ADI; 93.8% of CBS affiliates; 98.2% of FOX affiliates and 92.7% of NBC affiliates. Twenty percent of independent stations said they would seek retransmission consent. (See graph.)

Of those stations choosing retransmission consent, 25.1% sought that option with every cable system in their ADI. By network affiliation, the breakdown is as follows: ABC—24.7%; CBS—22%; FOX—25.9% and NBC 25.7%. Among independent stations, 26.7% said they will seek retransmisison consent with all cable systems in their ADIs.

Of TV stations electing retransmisison consent the average station has chosen to negotiate with 65.8% of the cable systems within its ADI. ABC affiliates will negotiate with 65.3% of cable systems in their ADIs; CBS with 59.9%; Fox with 79.5%; NBC with 67.4% and independent stations with 43.6%.

Stations Opting For Retransmission Consent With At Least One Cable System



* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.K

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 246]

[PK Logo] CABLE TV ADVERTISING July 28, 1993

Any business would jump at the chance to pocket 40 cents-60 cents profit on every dollar of revenue. Welcome to the wonderful world of local/spot cable advertising sales.

The typical MSO achieved a 49.6% cash-flow margin on its ad sales operations last year, up sharply from a 42.9% average in 1991, according to a PKA analysis of ad sales data supplied by major MSOs (see table below).

Local cable ad sellers appear to be reaping the rewards of substantial strategic investments, made at the start of the decade, in audience research, computer equipment, training, infrastructure and top sales talent.

These expenditures contributed to a slight dent in margins in recession-wracked 1991. Margins recovered nicely in 1992, however, thanks to stronger advertiser demand and improved cost efficiencies.

Four companies that saw markings slip between 1990 and 1991 (Adelphia, Multimedia, Time Warner, Times Mirror) lifted them back up in 1992 (see P. 1).

Continued aggressive spending will be necessary to stay competitive with local broadcast and print media. As a result, ad sales cash-flow margins are likely to top out at 45%-50% for most MSOs.

But let us repeat: That's not a bad neighborhood to live in, especially considering the burgeoning impact that ad sales cash flow is making on MSO bottom lines and private market values.

Per PKA estimates, the typical cable operator will net approximately $17 in ad revenue per local ad sub this year, implying $8.33/sub in cash flow at a 49% margin.

MSO AD SALES STATS

Company	Ad Rev. 1990	% Total 1991	MSO Rev. 1992	—Cash Flow Margin*— 1990	1991	1992
Adelphia	3.6%	n/a	4.0%	48.0%	40.0%	44.0%
Cablevision Industries	3.3	3.3	4.0%	n/a	n/a	n/a
Columbia International	n/a	n/a	4.3	n/a	n/a	62.0
Comcast	n/a	3.2	3.9	n/a	48.0	52.0
C-TEC	3.0	n/a	n/a	35.0	n/a	n/a
Greater Media	n/a	n/a	n/a	n/a	35.0	n/a
KBLCOM #	5.0	6.0	8.5	n/a	48.0	46.0
Lenfest Group	n/a	n/a	n/a	n/a	n/a	52.0
Multimedia Cablevision	3.0	3.0	3.0	40.0	36.6	39.4
Post-Newsweek	n/a	4.0	n/a	n/a	52.0	n/a
Prime	n/a	n/a	3.2	n/a	n/a	n/a
Rifkin & Associates	n/a	n/a	n/a	50.0	48.0	n/a
Sammons	n/a	n/a	2.0	n/a	n/a	43.0
Scripps Howard	n/a	n/a	3.6	n/a	n/a	n/a
Simmons	1.8	n/a	3.1	42.0	n/a	n/a
Sutton Capital	n/a	n/a	4.1	n/a	n/a	61.0
TeleCable	n/a	5.0	5.0	n/a	36.0	40.0
Tele-Communications Inc.	n/a	n/a	3.0	n/a	n/a	45.0
Time Warner@	3.0	3.5	3.6	50.0	41.0	53.0
Times Mirror	3.0	n/a	3.6	52.0	44.0	50.6
TKR	n/a	n/a	5.0	n/a	n/a	57.2
Wometco	2.1	3.0	n/a	n/a	n/a	n/a
Average	3.1%	3.9%	4.0%	45.3%	42.9%	49.6%

n/a = not available. * Cash-flow margin defined as: C.f. *before* taxes, interest and depreciation, but *after* all other ad sales-related expenses, as % of net ad rev. # Includes some Paragon systems. @ 1990/91 figures for Warner Cable systems only. © 1993 Paul Kagan Assoc., Inc. analysis of MSO data.

At a multiple of 10% cash flow, local ad sales are contributing $83.30 in incremental value to the average subscriber, equal to $4.3 bil. in aggregate value against approximately 52 mil. local ad subs.

MSOs also reported that ad sales averaged 4% of total revenue in 1992, up from 3.1% two years earlier (see P. 1 table).

ESPN and CNN accounted for more than 40% of 1992 ad billings at the typical MSO (see chart below, left). Their combined share fell from 44% in 1991, when record CNN ratings for its Gulf War coverage sparked unprecented local-advertiser demand for the news network's avails.

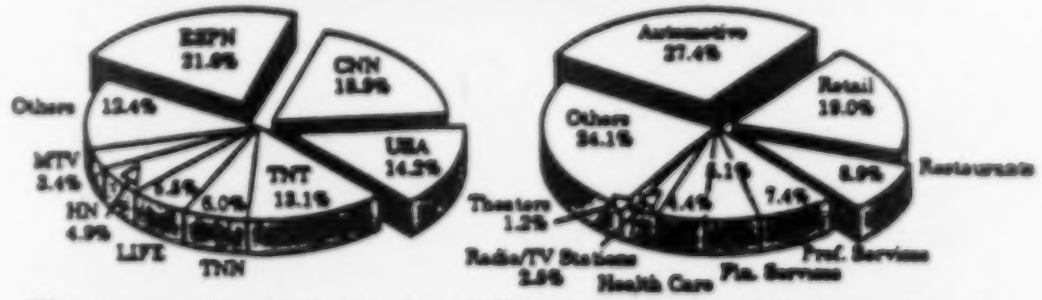
USA was the third most popular local ad seller, with a 14.2% average share of 1992 revenue, followed closely by TNT, with 13.1%.

Carving up the local ad pie another way—by type of advertiser—the automotive and retail categories boosted their combined billings share from 35% in 1991 to 46% in 1992 (see chart below, right).

A rebound in consumer spending in 1992 helped autos and retail take ad share away from local cable's next largest clients: restaurants, professional services and financial services.

Primary categories comprising the "others" segment (below, right) were furniture stores, night clubs/entertainment and political. At some MSOs, election-year spending by political candidates constituted as much as 5%-10% of ad revenue.

1992 AVG. SHARE OF AD REVENUE BY NETWORK AND TYPE OF ADVERTISER FOR REPORTING MSOs*



*Network average shares based on data from 13 MSOs covering 17.1 mil. local ad subs; type of advertiser avg. shares based on data from 10 MSOs representing 9.5 mil. ad subs. © 1993 Paul Kagan Assoc., Inc. est.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.I

* * * *

Dated: May 26, 1995

[Exhibit 200]

TURNER CABLE
NETWORK SALES, INC.

MEMORANDUM

TO: Paul Beckham
Bill Grumbles

FR: Doug Orr

DT: September 17, 1993

RE: TCNS 1994 Marketing Overview

The following will provide you with a broad overview of the TCNS marketing objectives that have been established for 1994, including strategies and proposed implementations.

POSITIONING STATEMENT

The primary responsibility of TCNS Marketing is to develop and implement marketing campaigns in support of efforts to maximize domestic distribution and subscription revenue of each of the Turner networks.

Marketing campaigns will be created primarily in support of 1) TCNS efforts to gain distribution through network carriage agreements and 2) affiliate efforts to maintain and increase network subscribership, viewership and local advertising.

INDUSTRY TRENDS

Several factors have led to a lessening of current opportunities for increased distribution of both new and exist-

ing networks. Overall, regulatory and market constraints upon operators' traditional revenue sources have lessened their willingness to assume additional programming expense.

Re-regulations—Recent legislation has imposed substantial limitations on operator's pricing of both the basic and expanded basic service packages. Increasingly, operators are looking for relief in the development of unregulated revenue streams such as local advertising, PPV and a la carte tiering.

Channel Capacity—Current channel capacity constraints within the affiliate universe limits channel clearance for new networks. Furthermore, ongoing retransmission consent negotiations find operators committing most available channels to the carriage of new broadcast-affiliated networks in lieu of cash payments. The advent and implementation of compression technology, fiber optics and traditional rebuilds over the next few years should lessen capacity constraints.

Tiering/A la carte—In efforts to maximize subscriber revenue and the lessen the impact of basic rate regulation, operators have begun to offer packages of networks that allow subscribers the option of paying for additional programming. Although this offers an opportunity for carriage on a system, particularly for new networks, it generally limits viewing to a smaller portion of the potential audience. Such tiering poses the even greater threat of subscriber erosion among established networks that may be selected for tier carriage, although operator intentions are to maintain tier penetration in excess of 90%.

Channel Realignment—Primarily in response to reregulation, cable systems have begun to realign placement of cable networks. These changes are based on a number of different factors including technological constraints, the grouping of like-network categories and positioning for

future tiers. Indications are that the Turner networks have fared better than most in maintaining consistent and favorable placement.

Subscriber Growth—Even though cable subscriber figures continue to grow, it is becoming increasingly difficult to gain new subscribers as the rate of subscriber growth continues to decline. The projected growth of 2.6% for 1994 is well below the average subscriber growth rate of 6.5% in 1990.

MARKETING OBJECTIVES/STRATEGIES

- Reinforce the trade and consumer benefits of the Turner networks to positively influence the launch of networks not presently carried. Focus on carriage deal points, quality of programming and industry leadership in sales and marketing support.

  —maintain aggressive trade advertising presence to highlight key network benefits

  —develop complementary collateral support materials for TCNS sales efforts

  —implement targeted direct mail campaign to maintain top-of-mind awareness among top industry decision-makers

  —maintain high-profile presence at cable trade shows

- Increase the real and perceived value of the Turner networks presently carried by focusing on the potential for subscriber acquisition and retention and local advertising revenue growth. In support of on-going renegotiation of network carriage agreements, build on the message that the Turner networks provide an excellent return on investment.

  —continue to reinforce network value through trade advertising campaign

—implement national and local market ad sales promotions to drive local ad revenues as well as increase network awareness in the market

—develop "Advertise On" campaigns for CNN, TNT and HN to attract local advertisers

—conduct market-specific local ad seminars to enhance the Turner networks ad revenue potential

—develop complementary collateral support materials for TCNS sales efforts

—maintain continued presence at cable trade shows

- Develop marketing campaigns in support of operator efforts to maximize awareness and distribution of tier/a-la-carte networks. Utilize geo-coding resources to assist systems in targeting potential audiences.

—develop network-specific, customizable marketing campaigns designed to increase subscriber penetration for Turner networks carried in tier or a la carte packages

—develop Hispanic/Spanish language campaign for the Cartoon Network and CNNI

—develop tier upgrade campaigns for Cartoon Network, CNNI and TCM

—develop commercial sales direct mail card for CNNI

- Enhance network's image and awareness by extending brand positioning through all trade and affiliate-placed consumer advertising.

—work closely with each network marketing staff to position the network in all communication

—keep abreast of network programming and marketing efforts through the designation of a network point person

—distribute tune-in materials for each network via the TAP program

—drive increased local tune-in through Frequent Promoter incentive program

- Provide comprehensive marketing support to assist affiliates in creating consumer awareness for network channel placement.

—develop customizable, multi-media advertising including cross-channel spots, direct mail and print

—subsidize affiliate campaigns where necessary

—consider channel placement marketing incentive

BUDGET ALLOCATIONS

(See Attached)

NETWORK MARKETING OBJECTIVES

CNN

- Differentiate CNN programming genres to facilitate local program promotion
- Increase local ad sales revenue share through sales promotion
- Position CNN for continued basic distribution
- Develop channel realignment marketing campaign

HN

- Drive Headline News distribution by maintaining conspicuous profile of network programming and benefits
- Increase local ad sales penetration and local ad revenue share
- Develop local sales promotion

CNNI

- Establish trade positioning and outline network benefits through high-profile trade marketing
- Differentiate CNNI programming from CNN
- Maintain consistent presence among industry decision-makers through direct mail campaign
- Develop and test-market subscriber upgrade/acquisition campaigns in support of compression tier launches

TBS

- Position TBS for continued basic distribution
- Develop aggressive tier upgrade campaigns to implement in markets where TBS is tiered

TNT

- Roll-out aggressive trade and direct mail campaigns to reinforce the network's return on investment to position sales for negotiation of new TNT contracts.

Cartoon

- Maintain aggressive trade marketing campaign highlighting network performance and affiliate benefits
- Increase local advertising market share through development of target market sales promotions
- Maintain quarterly direct mail campaign to industry decision-makers
- Develop customizable tier upgrade and hispanic acquisition campaigns and test market

TCM

- Establish trade positioning and outline network benefits through high-profile trade marketing

- Maintain consistent presence among industry decision-makers through direct mail campaign
- Develop and test-market subscriber upgrade/acquisition campaigns

1994 BUDGET

	CNN	HN	TBS	TNT	Cartoon	TCM	CNNI	TOTAL
TRADE MARKETING								
Trade Advertising	80,000	85,000	125,000	253,000	290,000	370,000	130,000	1,333,000
Brochures	20,000	20,000	28,000	60,000	60,000	49,000	30,000	267,000
Posters	20,000	20,000	20,000	48,000	25,000	24,500		157,500
Direct Mail	30,000	8,000	20,000	20,000	75,000	20,000	15,000	188,000
A/V: Requests, Misc., & Radio	18,550	10,000	15,000	30,000	30,000	24,000	10,000	137,550
CSR Video Tape (& dubs)	20,000	12,000	18,000	15,000	15,000	10,000		90,000
CSR Kit	14,000	14,000	12,000	20,000	14,000	14,000		88,000
Video Presentation Tape	12,000	3,000	8,000	20,000	50,000	60,000	50,000	203,000
Billstuffers	35,000			35,000		60,000	25,000	155,000
Billboards						28,000		28,000
Upgrade or Other Campaigns					120,000	160,000	150,000	430,000
Launch Kits					22,000	75,000	20,000	117,000
Launch Event						-		0
NCTA, W. Show, CTAM Mkt'g/DM						-	15,000	15,000
NFL				150,000				130,000
Olympics				150,000				150,000
Goodwill Games			200,000					200,000
TAP Program	164,000	88,000	170,000	170,000	100,000	23,000	15,000	730,000
Freq. Promoter Program	80,000	60,000	90,000	80,000	30,000			340,000
Local Ad Support	149,000	100,000		150,000	27,000			426,000
Promotions	60,000	50,000	50,000	160,000	100,000	80,000	20,000	520,000
OTHER: (Includes: quarterly highlight	47,450	30,000	44,000	39,000	39,000	54,500	20,000	273,950
calendars, sales folder & one-sheets,								
cogrets ad, x-mas card, misc. print,								
warehouse)								
TRADE MARKETING TOTAL	750,000	500,000	800,000	1,400,000	997,000	1,052,000	500,000	5,979,000
TOTAL 1993	936,800	725,742	1,062,100	2,412,919	1,041,000	n/a	n/a	6,178,561
% CHANGE	-0.20	-0.31	-0.25	-0.42	-0.04			-0.03

BEST AVAILABLE COPY

1994 BUDGET

1994 Marketing Expense Summary		EXPENSES	REVENUE
Trade Marketing		5,999,000	
Event Marketing		1,704,753	
Turner Basics		786,949	910,000
Sub-Total		7,580,702	
		45%	
Co-op Launch Support		2,006,500	
Group Marketing		1,335,500	
Tune-In Marketing		4,943,700	
Regional Marketing		1,113,245	
Sub-Total		9,398,945	
		55%	
GRAND TOTAL		16,979,647	

1994 BUDGET

EVENT MARKETING 1994	$1,704,753							
TOTAL 1993	1,268,300							
% CHANGE	34%							
Primary Increases:								
Goodwill Games	54,000							
Olympics	91,600							
Booth Space	221,200							
TCM Launch Promotions	158,000							
TOTAL:	524,800							
TURNER BASICS	REVENUE	EXPENSES	INCOME					
TOTAL 1994	1,604,755	1,481,704	123,051					
TOTAL 1993	1,407,700	1,281,546	126,154					

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VILG

* * * *

Dated: May 26, 1995

[Exhibit 161]

THE HISTORY CHANNEL

1994 BUSINESS PLAN

and

FINANCIAL FORECAST

1995-1998

Prepared by:

A&E NETWORKS
HEARST/ABC/NBC

November, 1993

* * * *

* * * *

The Cable Marketplace

The cable marketplace is undergoing significant change.

a. Compression technology, although somewhat delayed, will soon radically alter the typical cable system's line-up. Virtually every cable system will have the capacity for many additional channels.

b. Re-transmission consent has had an effect on the marketplace. Operators in some large markets may be forced to drop or double up networks because of channel capacity limitations. Broadcast networks have moved to the forefront of distribution through offers which center around the granting of retransmission rights in return for the carriage of their new services.

c. The way cable is sold to subscribers will change. Tiered, a la carte and PPV services will supplement the norm of basic services.

d. The audience potential of individual services will diminish because of increased fragmentation of the total audience among a far greater number of services.

Virtually every programming competitor is currently developing plans for one or more additional cable networks. Operators anticipate the introduction of these new services. Reregulation will drive new channels to unregulated tiers. Additionally, some existing basic networks may accede to operator demands for a la carte distribution which will move these services into tiers as well.

In today's environment, the launch of a new basic service faces significant obstacles in attempting to gain distribution. New basic networks—for example, Court, E! and

Comedy Central—have each encountered hard times and slow growth as a result of limited channel capacity and the uncertainty of the regulatory environment. A good part of their success has derived from decisions by systems to add new services in order to reach FCC benchmarks.

On the other hand, USA's launch of Sci-Fi has been successful, and Turner's The Cartoon Channel is making progress. Nevertheless, both networks are looking at a much slower rate of growth than networks launched two or three years ago. Free carriage (6 to 12 months), equity participation and long term deals are being offered as incentives so that operators will "find room." The days of growing rapidly to reach 50 million homes with a new service are over in the short term, if not forever.

In the fact of these market realities THC will pursue this business development rationale.

Rationale for Establishing THC

A&E Networks intends to develop flanking networks to protect A&E's market share. Building from A&E's success with traditional genres, THC will be developed to reinforce A&E positioning and to offset competitive encroachment on A&E's niches. The History Channel holds much promise for A&E Networks. THC should enable A&E Networks to strengthen the value of A&E with the current audience while extending the A&E Networks franchise to new viewers. THC will offer flexibility in arrangements for carriage to lessen-affiliate resistance.

THC will develop as a flexible network, built on carriage flexibility, a realistic growth model and a penetration and volume incentive fee structure.

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.I

* * * *

Dated: May 26, 1995

[Exhibit 198]

MEMORANDUM

To: Paul Beckham

From: Doug Orr

Date: 12/6/93

Re: KNWS-TV, Houston, TX

During a trip in early November to see the TimeWarner system in Houston (230,000 subs), we were made aware of the recent start-up of an all-news station, KNWS, Ch. 51. Having elected must-carry status, the cable system expected to be carrying the signal by mid-December.

TimeWarner is particularly concerned that KNWS has been allowed to become a CNN broadcast affiliate. While there, the system showed us evidence of KNWS' heavy reliance on CNN footage to program their station. The system became even more irate when, immediately following our visit, the Gore-Perot debate aired in its entirety on KNWS.

The launch of TCN on a tier in this system is pending. We are optimistic about making headway with TCM. For our on-going discussions, I would like to clarify our position regarding KNWS. It was my understanding that in the past we have chosen not to license CNN footage to either local or regional all-news services in other markets (e.g.—New England News Channel, Orange County News, NY1, etc.). If this is in fact the case, should KNWS be made an exception to this policy?

KNWS is competing directly not only for viewership to CNN & HN, but also for local advertising dollars generated by those same networks. If there is anyway we could reconcile this situation, it would be beneficial on several fronts. I have attached an air check of KNWS forwarded by our affiliate. Let me know how you would like to proceed.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.E

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 91]

STATE OF CABLE 1994©

Horowitz Associates, Inc.
Marshall Cohen Associates

1971 Palmer Avenue
Larchmont, NY 10538

* * * *

Chapter 5

Service Configurations in the System and in the Home

Cable system operators were asked a series of questions about current channel capacity, Broadcast Basic, tiering, a la carte service offerings, and addressability as well as their plans for the future in these important areas. Cable subscribers were asked about the way cable service is configured in the home. Questions covered AO's, converters, number of channels, tiering and a la carte services. The availability, usage and prospects for pay-per-view is studied in the following chapter.

Channel Capacity, Broadcast Basic, Tiering and "a la Carte"

On average, the cable systems surveyed in "State of Cable 1994" offer 52 (up from 49 in 1993 survey) channels (Table 5.1-5.4). Most (65%, up from 60% last year) intend to increase channel capacity over the next 2 years to a projected average of 79 (up from 67 last year) channels, a dramatic, though not surprising, increase. Across all systems, channel capacity is predicted to be 65 (vs. 60 in 1993).

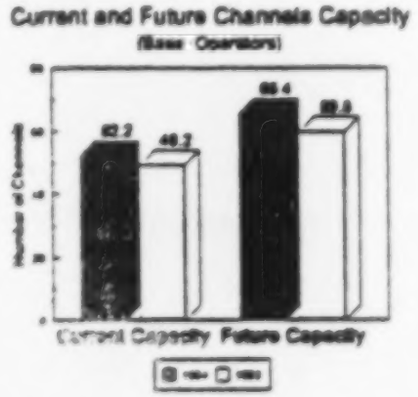


Chart 26: Actual and predicted increases in channel capacity: 1994 vs. 1993.

Almost three-quarters (73% vs. 66% last year) of all systems currently offer a Broadcast or Lifeline basic service and an additional 8% of systems intend to offer it within the next 5 years (only 8%, down from 16%, last year say they will never offer such a service). One-third (35%) of those who currently or intend to offer such a service, say they have or expect to have ". . . any satellite delivered cable services like CNN or ESPN . . ." on their Broadcast or Lifeline service (Table 5.5). These data underscore the near-term importance of marketing and positioning basic services to operators, as well as consumers, if they are to maintain their distribution and audience. On the other hand, when asked to project what the

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

TIME WARNER ENTERTAINMENT COMPANY, L.P.'S CORRECTED APPENDIX TO BRIEF IN SUPPORT OF ITS MOTION FOR SUMMARY JUDGMENT

* * * *

May 26, 1995

[Exhibit 16]

THE TELEVISION INDUSTRY

1994

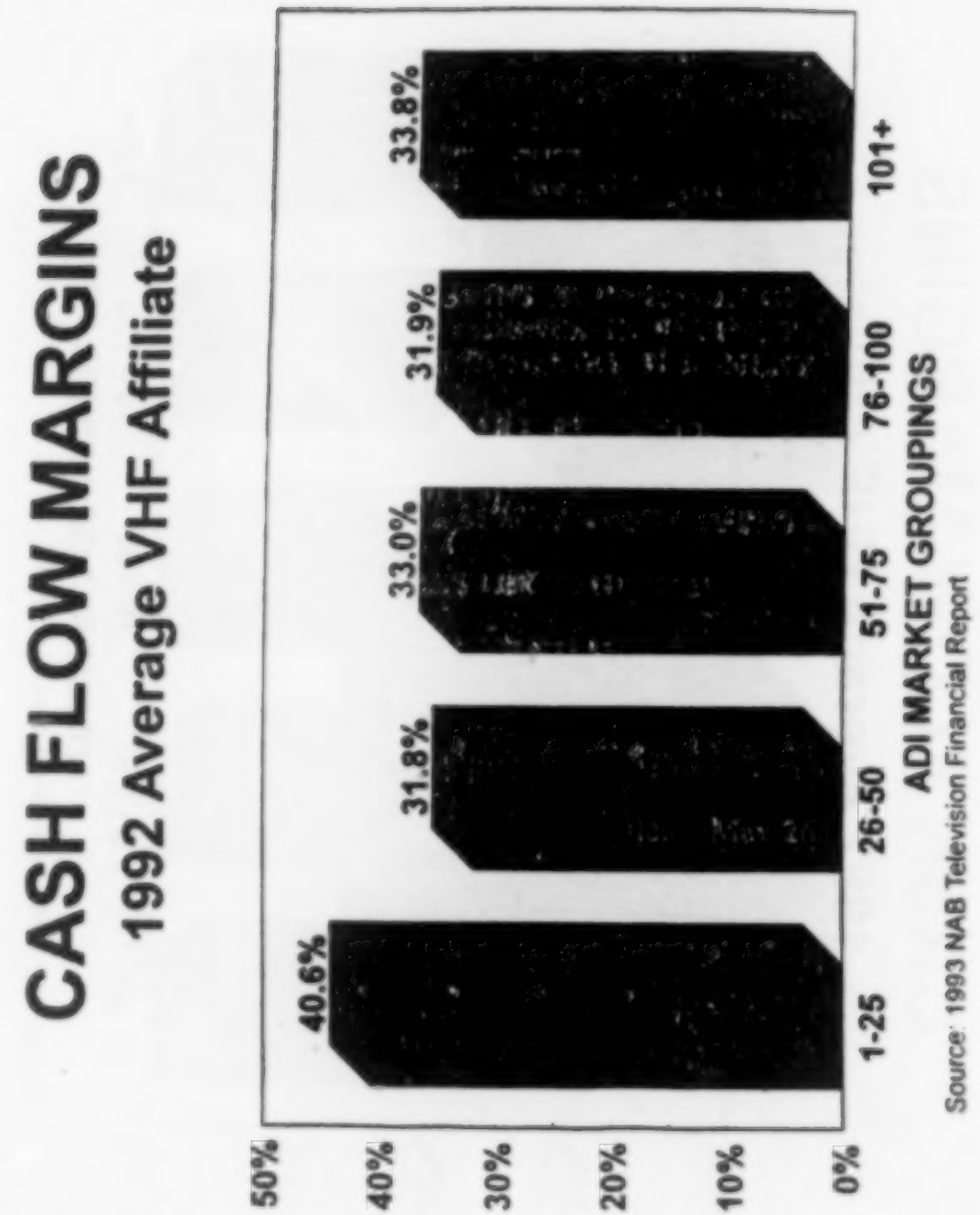
MARKET-BY-MARKET

REVIEW

HARRISON
BOND &
PECARO

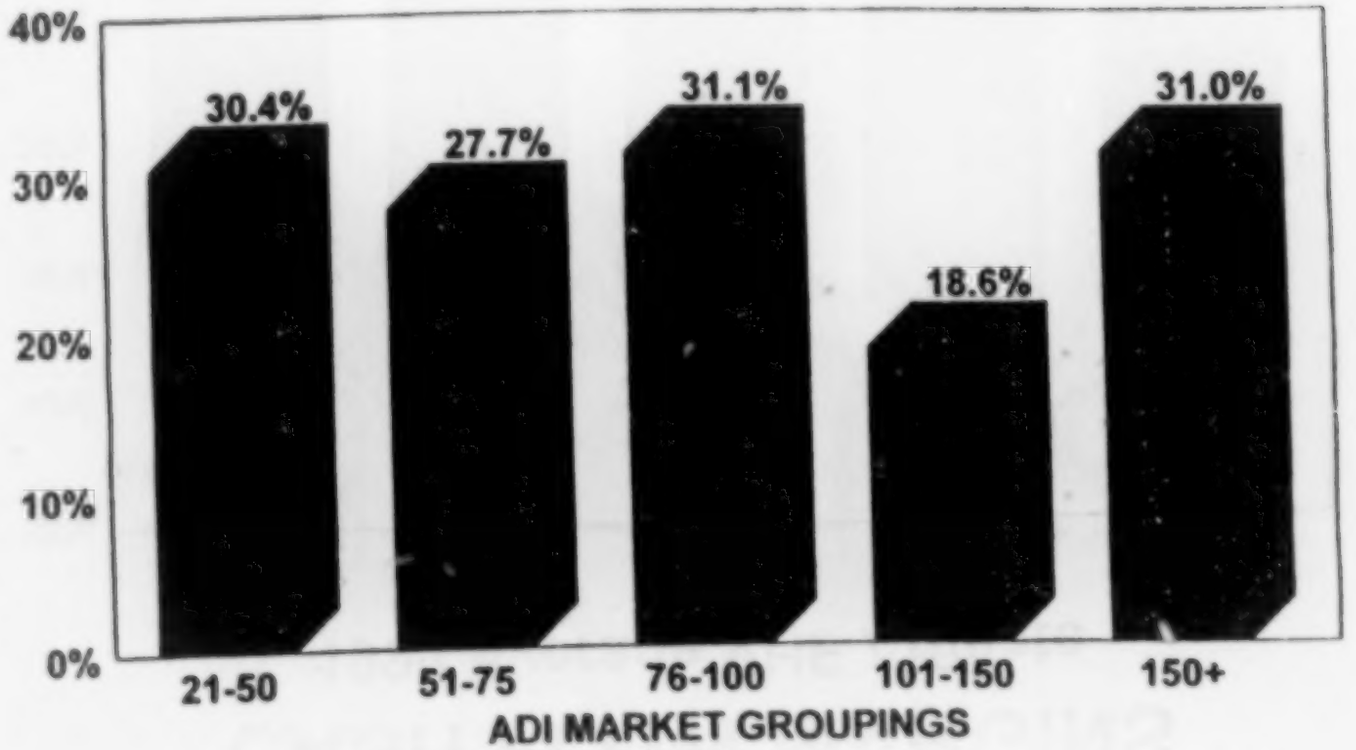
[NAB Logo]

[Appendix B]



CASH FLOW MARGINS

1992 Average UHF Affiliate



Source: 1993 NAB Television Financial Report

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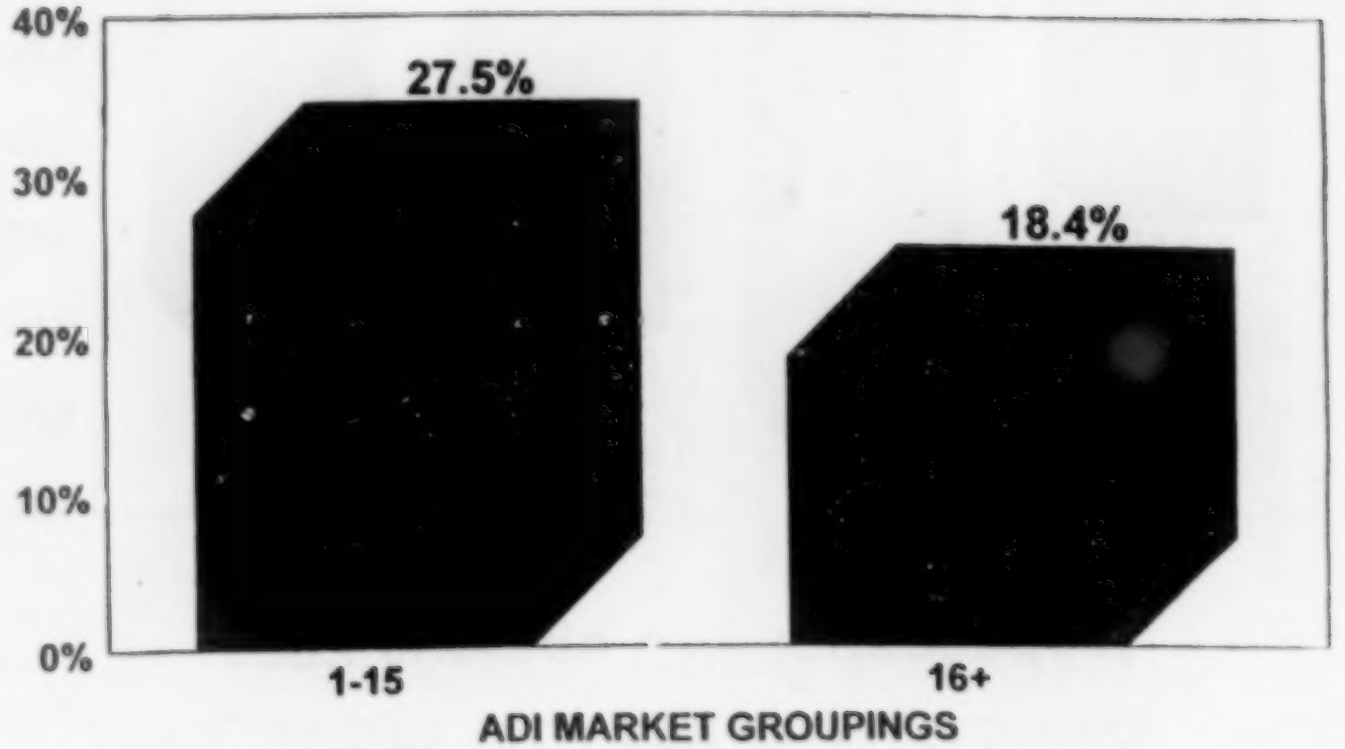
CASH FLOW MARGINS

1992 Average VHF Independent



Source: 1993 NAB Television Financial Report

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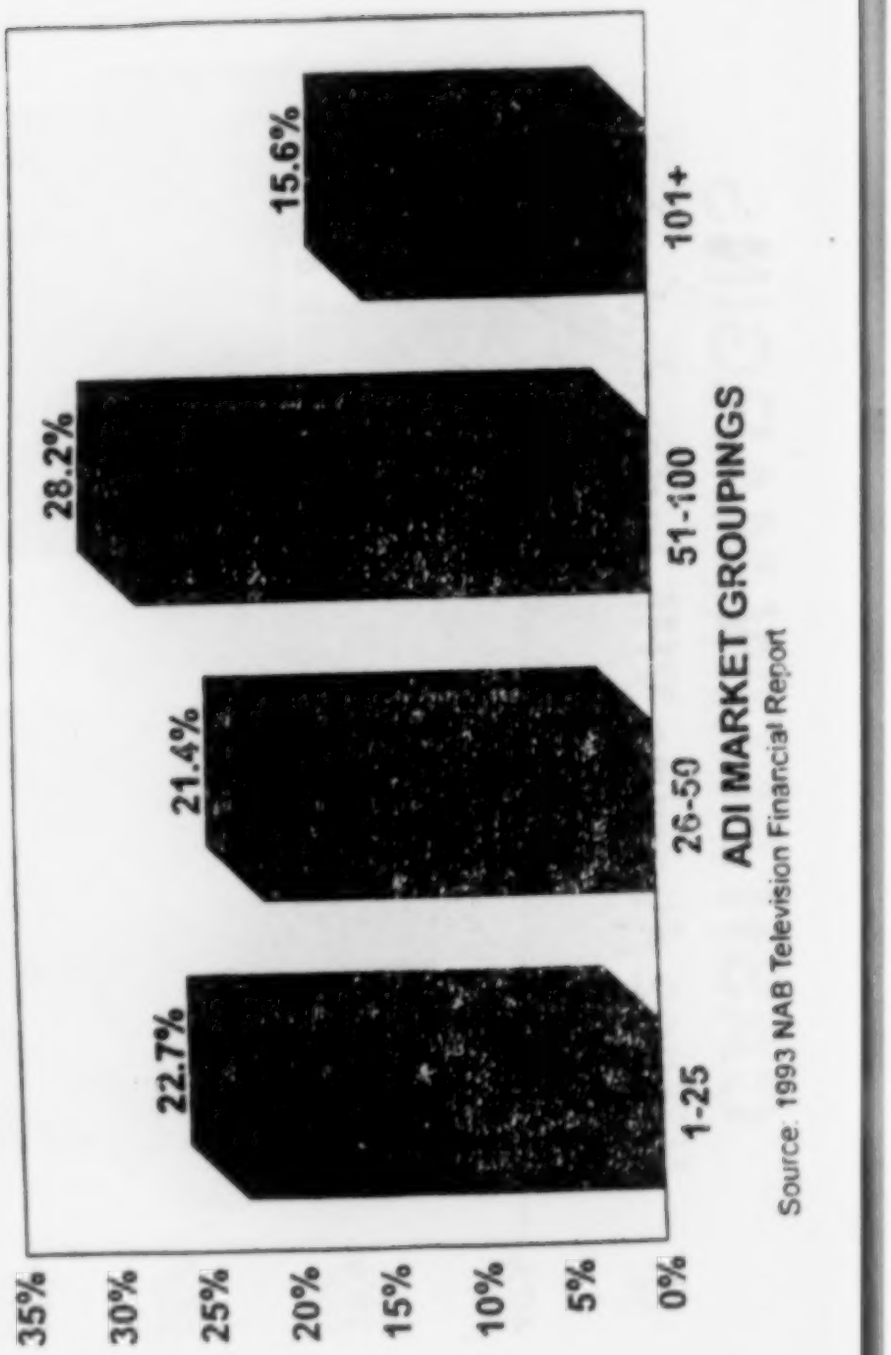

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS CITED IN TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MEMORANDUM OF LAW IN OPPOSITION TO DEFENDANTS' AND INTERVENORS' SUMMARY JUDGMENT MOTIONS AND IN FURTHER SUPPORT OF ITS SUMMARY JUDGMENT MOTION VOLUME II, TABS 21-40

* * * *

June 16, 1995

[Exhibit 33]

Broadcasting & Cable

May 23, 1994

SECTION: Vol. 124; No. 21; Pg. 58; ISSN: 1068-6827

HEADLINE: Loss of must carry doesn't worry broadcasters; must-carry provisions of the 1992 Cable Act

BYLINE: McAvoy, Kim

* * * *

Under the 1992 Cable Act, public broadcasters cannot ask for retransmission-consent fees. However, the loss of must carry may not have a detrimental effect on them either. "We don't expect our stations will be taken off," says *David Brugger*, president of America's Public Television Stations.

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.K

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 244]

[PK Logo] CABLE TV ADVERTISING

Local/spot cable ad sellers are achieving benchmarks that just a few years ago seemed dreamy, distant, almost unattainable: $1 bil. gross revenue in 1993 and a projected average $2/sub/month in gross billings this year.

Gross local/spot ad sales increased 20% to $1.05 bil. last year and are on course to rise 19% to $1.25 bil. in 1994, based on our exclusive annual survey of top-50 MSO ad sales execs (see P. 2-3 and the analysis below).

The '94 forecast works out to $23.51 per sub ($1.96/sub/mo.) in cable systems with ad sales, a leap of nearly $10/sub in three short years from an industry average $14.93/sub in recession-ravaged 1991.

Cable rate regulation hasn't slowed the local ad sales juggernaut.

On the contrary, the new rules may have helped because MSOs are embracing unregulated revenue streams, especially the ad business with its juicy cash flow margins and zero impact on subscribers' bills.

Thus far, retiering and a-la-c[illegible] packaging have not reduced household coverage for the five most popular channels (ESPN, CNN, USA, TNT, Life-time) that together generate three-quarters of a typical system's ad revenue.

LOCAL/SPOT CABLE GROSS AD REVENUE ESTIMATES

		1987	1988	1989	1990	1991	1992	1993	1994
1 Total cable subscribers	(mil.)	42.6	45.7	49.3	51.7	53.4	55.2	57.2	58.8
2 Top 50 MSOs total subs	(mil.)	35.6	38.5	41.0	43.1	45.6	47.3	50.2	52.2
3 Top 50 subs % total subs	(%)	83.6	84.2	83.2	83.4	85.4	85.7	87.8	88.8
4 Top 50 MSOs ad revenue	(mil.)	$ 202	283	373	478	553	679	858	1,045
5 Adjusted industry total rev.	(mil.)	$ 242	336	449	574	648	793	978	1,177
6 Interconnect (IC) revenue	(mil.)	$ 85	125	154	203	228	275	328	399
7 Unrecognized % of IC revenue	(%)	30	30	30	29	27	25	22	19
8 Unrecognized IC revenue	(mil.)	$ 26	38	47	60	62	69	72	76
9 Total local/spot billings	(mil.)	$ 268	374	496	634	710	862	1,050	1,253
10 Increase over previous year	(%)	37.4	39.8	32.5	27.8	12.2	21.4	20.4	19.3
11 Top 50 MSOs local ad subs	(mil.)	26.9	31.0	34.1	36.8	40.6	42.4	44.6	46.2
12 Total local cable ad subs	(mil.)	32.2	36.8	40.9	44.2	47.5	49.6	51.4	53.3
13 Increase over previous year	(%)	31.4	14.3	11.1	8.1	7.5	4.4	3.6	3.7
14 Local ad revenue/ad sub		$8.29	10.15	12.10	14.30	14.93	17.36	20.43	23.51
15 Increase over previous year	(%)	4.6	22.2	18.2	18.2	4.4	16.3	16.2	15.1

Notes: (Line 2)—Total subscribers in top 50 MSOs, including systems with and without ad sales operations. (Line 5)—Line 4 divided by Line 3. (Lines 6-8)—Correction factor to account for underreporting that can occur when net interconnect or turnkey operation commissions are co-mingled with in-house sales. (Line 9)—Line 5 + Line 8. (Line 11)—Subs in top 50 MSO systems with ad sales operations only. (Line 14)—Line 9 divided by Line 12.

© 1994 Paul Kagan Associates, Inc. estimates.

LOCAL AD SALES BY MAJOR CABLE OPERATORS, 1993-1994

Company	Total Subs 1993* (000)	---Gross Local Ad Revenue-- 1993 (000)	Proj 1994 (000)	% Chg. '93-'94	----Ad subs---- 1993 (000)	Proj. 1994 (000)	% Ad subs# 1993	--Ad Revenue per sub- 1993	Proj. 1994	% Chg. '93-'94
1 Tele-Comm. Inc. (1)	10,406	$185,000	$230,000	24.3%	10,000	10,250	96.1%	$18.50	$22.44	21.3%
2 Time Warner	7,215	127,927	155,453	21.5	6,908	7,100	95.7	18.52	21.89	18.2
3 Continental (e)	3,149	53,000	62,540	18.0	2,456	2,530	78.0	21.58	24.72	14.6
4 Comcast	2,648	54,677	70,315	28.6	2,648	2,730	100.0	20.65	25.76	24.7
5 Cablevision Systems	2,148	28,900	33,350	15.4	1,609	1,734	74.9	17.96	19.23	7.1
6 Cox	1,784	43,320	52,321	20.8	1,784	1,831	100.0	24.28	28.57	17.7
7 Newhouse (e) (2)	1,384	18,000	22,500	25.0	1,384	1,425	100.0	13.01	15.79	21.4
8 Cablevision Industr.	1,328	21,400	25,950	21.3	1,150	1,200	86.6	18.61	21.63	16.2
9 Times Mirror	1,274	22,771	30,291	33.0	897	1,036	70.4	25.37	29.23	15.2
10 Jones	1,263	30,798	36,968	20.0	1,152	1,200	91.2	26.73	30.81	15.2
11 Adelphia	1,244	20,867	25,700	23.2	1,200	1,300	96.5	17.39	19.77	13.7
12 Viacom	1,094	20,971	25,000	19.2	1,094	1,127	100.0	19.17	22.19	15.7
13 Sammons (3)	1,072	25,333	28,000	10.5	1,070	1,090	99.8	23.68	25.69	8.5
14 Falcon	1,055	5,567	6,910	24.1	450	475	42.7	12.37	14.55	17.6
16 Crown Media	857	9,097	11,390	25.2	692	700	80.7	13.15	16.27	23.8
17 Colony (e)	787	16,830	19,890	18.2	750	800	95.3	22.44	24.86	10.8
18 TeleCable	717	18,280	21,985	20.3	555	565	77.4	32.94	38.91	18.1
19 Scripps Howard	702	10,269	12,221	19.0	392	413	55.9	26.18	29.62	13.1
20 Lenfest	658	6,693	6,960	4.0	533	548	81.0	12.56	12.71	1.2
21 Intermedia	632	3,209	6,222	93.9	375	450	59.3	8.56	13.83	61.6
22 KBLCOM	605	13,917	15,841	13.8	600	610	99.2	23.19	25.97	12.0
23 TKR	602	13,700	16,850	23.0	590	602	98.1	23.20	27.99	20.6
24 Prime	557	8,538	10,171	19.1	557	602	100.0	15.33	16.91	10.3
25 Post-Newsweek	482	9,311	11,440	22.9	456	463	94.7	20.40	24.73	21.2
26 TCA (e)	473	5,120	5,376	5.0	407	410	86.0	12.58	13.11	4.2
27 Hometco (4)	452	7,089	8,166	15.2	400	420	88.5	17.72	19.44	9.7
28 Tele-Media	426	1,143	1,181	3.4	262	271	61.5	4.36	4.36	0.0
29 Maclean Hunter	425	10,198	11,777	15.5	425	440	100.0	24.00	26.77	11.5
30 Multimedia Cablevision	417	5,649	6,223	10.2	331	336	79.4	17.07	18.52	8.5

* 1994 Paul Kagan Associates, Inc. analysis of cable industry data.

(continued on next page)

[00023906]

CABLE TV ADVERTISING, Dec 15, 1994 p 287

BEST AVAILABLE COPY

SURVEY OF MAJOR CABLE OPERATOR LOCAL AD SALES (continued from P. 2)

Company	Total Subs 1993* (000)	--Gross Local Ad Revenue-- 1993 (000)	Proj. 1994 (000)	% Chg. '93-'94	---Ad subs--- 1993 (000)	Proj. 1994 (000)	% Ad subs#	--Ad Revenue per sub- 1993	Proj. 1994	% Chg. '93-'94
31 Rifkin & Associates	380	$ 4,900	$ 5,750	17.3%	290	310	76.3%	$16.90	$18.55	9.8%
32 Triax (e)	370	61	66	7.8	14	15	3.6	4.53	4.55	0.4
33 Western	323	7,220	7,581	5.0	321	331	99.4	22.49	22.93	1.9
34 C-TEC	258	3,814	4,533	18.9	203	214	78.7	18.79	21.18	12.8
35 Columbia International	249	4,700	6,400	36.2	245	260	98.4	19.18	24.62	28.3
36 Service Electric	242	1,220	1,269	4.0	235	235	97.1	5.19	5.40	4.0
37 SBC Media Ventures	233	4,842	7,936	63.9	226	235	96.9	21.44	33.84	57.8
38 Greater Media	227	2,769	3,197	15.5	150	160	66.1	18.45	20.04	8.6
39 Harron	223	2,800	3,300	17.9	198	208	88.8	14.14	15.87	12.2
40 Media General	220	5,356	7,442	38.9	220	226	100.0	24.30	32.92	35.5
41 U.S. Cable (e)	209	2,756	2,894	5.0	141	145	67.3	19.61	19.99	1.9
42 Multivision	208	2,730	3,253	19.1	208	212	100.0	13.12	15.36	17.1
43 Garden State	190	3,510	4,200	19.7	190	194	100.0	18.47	21.65	17.2
44 Sutton Capital	183	3,327	3,985	19.8	141	143	76.8	23.68	27.87	17.7
45 Armstrong	181	1,894	2,030	7.2	155	155	85.6	12.22	13.10	7.2
46 Brenan	174	2,041	3,187	56.2	118	136	68.1	17.22	23.48	36.3
47 Simmons (5)	169	762	875	14.8	67	74	39.9	11.31	11.82	4.5
49 Summit	157	2,687	2,510	-6.6	157	161	100.0	17.10	15.61	-8.7
50 Blade	149	2,672	3,212	20.2	149	159	100.0	17.91	20.20	12.8
Total	50,202	$857,633	$1,044,610	21.8%	44,557	46,227	88.8%	$19.25	$22.60	17.4%

* PKA estimates of MSO subs at 12/31/93.
\# Percentage of total 1993 subs in systems with local cable ad sales.
(e) - PKA estimate.
(1) 1993 figures do not include third-party dollars.
(2) Newhouse includes: Vision, Metrovision and NewChannels.
(3) Sammons purchased Cardinal Comm. July 1993.
(4) Figures include GCTV, which is managed by Wometco.
(5) Figures do not include third-party revenue dollars.

NSOs not reporting sales activity: Century (15) and Northland (48).

© 1994 Paul Kagan Associates, Inc. analysis of cable industry data.

[0023907]

CABLE TV ADVERTISING/JUNE 15, 1994/P. 3 of 8

50 Cents Profit on Every Dollar

Long-time industry fundamentals remain intact and continue to boost billings—for example, ad insertions on a greater number of networks, more media dollars shifting from broadcast to cable viewing shares grows sophisticated interconnects attracting more spot business to major markets.

Steady double-digit growth has pushed ad sales to about 5% of total revenue at the typical MSO. Several players, including Colony, Jones, Multivision and TeleCable, are now at 7% or higher (see below).

The table below also affirms this is a high-margin business. Surveyed MSOs report an average 49%-50% cash flow margin in 1992 and 1993. Again, several veterans are north of 50%, including such giants as TCI, Time Warner, Comcast and Times Mirror.

Multiplying a 50% cash flow margin by $840 mil. in estimated *net* 1993 local/spot cable ad revenue yields $420 mil. in cash flow, or about $8.17 per sub against 51.4 mil. local cable ad subs.

MSO AD SALES STATS

Company	Ad Rev. % Total MSO Rev. 1990	1991	1992	1993	—Cash Flow Margin *— 1990	1991	1992	1993
Adelphia	3.6%	n/a	4.0%	5.0%	48.0%	40.0%	44.0%	45.0%
Blade	n/a	n/a	n/a	5.0	n/a	n/a	n/a	70.0
Cablevision Ind.	3.3	3.3%	4.0	4.8	n/a	n/a	n/a	n/a
Colony	n/a	n/a	n/a	7.5	n/a	n/a	n/a	44.0
Columbia Int'l.	3.0	n/a	4.3	n/a	n/a	n/a	62.0	n/a
Comcast	n/a	3.2	3.9	4.4	n/a	48.0	52.0	51.0
C-TEC	3.0	n/a	n/a	n/a	35.0	n/a	n/a	n/a
Falcon	n/a	n/a	n/a	n/a	n/a	n/a	n/a	46.0
Garden State	n/a	n/a	n/a	n/a	30.0	n/a	n/a	n/a
Greater Media	n/a	n/a	n/a	n/a	n/a	35.0	n/a	n/a
Jones	n/a	n/a	n/a	7.0	49.8	n/a	n/a	46.0
KBLCOM	5.0	6.0	8.5	n/a	n/a	48.0	46.0	n/a
Lenfest	n/a	n/a	n/a	3.5	n/a	n/a	52.0	n/a
Multimedia	3.0	3.0	3.0	3.0	40.0	36.6	39.4	34.6
Multivision	n/a	n/a	n/a	12.9	n/a	n/a	n/a	45.0
Post-Newsweek	n/a	4.0	n/a	5.0	n/a	52.0	n/a	n/a
Prime	n/a	n/a	3.2	n/a	n/a	n/a	n/a	n/a
Rifkin & Associates	n/a	n/a	n/a	n/a	50.0	48.0	n/a	49.0
Sammons	n/a	n/a	2.0	n/a	n/a	n/a	43.0	n/a
Sripps Howard	n/a	n/a	3.6	n/a	n/a	n/a	n/a	n/a
Simmons	1.8	n/a	3.1	n/a	42.0	n/a	n/a	n/a
Sutton Capital	n/a	n/a	4.1	n/a	n/a	n/a	61.0	n/a
TeleCable	n/a	5.0	5.0	7.0	n/a	36.0	40.0	42.0
Tele-Comms. Inc.	n/a	n/a	3.0	5.0	n/a	n/a	45.0	56.0
Tele-Media	n/a	n/a	n/a	1.1	n/a	n/a	n/a	n/a
Time Warner	n/a	3.0	3.6	3.4	n/a	40.0	53.0	60.0
Times Mirror	3.0	n/a	3.6	4.2	52.0	44.0	50.6	50.8
TKR	n/a	n/a	5.0	4.0	n/a	n/a	57.2	52.0
Wometco	2.1	3.0	n/a	n/a	n/a	n/a	n/a	50.0
Average	3.1%	3.8%	4.0%	5.2%	43.4%	42.8%	49.6%	49.4%

n/a= not available. * Cash flow (before taxes, interest, depreciation and amortization, but after all other ad sales-related expenses) as a percent of net ad revenue. © 1994 Paul Kagan Associates, Inc. analysis of MSO data.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

PLAINTIFFS' EXHIBITS IN SUPPORT OF THEIR MOTION FOR SUMMARY JUDGMENT

VOLUME II

EXHIBITS U-V

* * * *

[Exhibit V]

[NAB Logo]

Legal Department
June 21, 1994

William E. Kennard, Esquire
General Counsel
Room 614
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Dear Bill:

This letter will address both the legal and policy questions that would arise if the Supreme Court decides that must carry is unconstitutional. We appreciate your concern about this issue which has been a long-sought objective of local television stations.

Legal Issues

The first issue is whether an adverse Supreme Court decision will have any immediate effect. Under Supreme Court Rule 45, the decision would not be self-executing; *i.e.*, must carry obligations of cable systems would not disappear immediately upon announcement of the Court's decision. Under Rule 45, the mandate will issue 25 days after announcement of the decision. The must carry rules would not become invalid even then, because the mandate would only return the case to the three-judge district court for entry of a new judgment in accordance with the Supreme Court's decision.

The district court would then have to face an issue unresolved in its initial decision (and which is not likely to be addressed by the Supreme Court)—whether must carry and retransmission consent are so inextricably linked that Congress could not have intended to enact one without the other. If so, the cable plaintiffs argued that retransmission consent would have to be thrown out as well

were must carry deemed unconstitutional.[1] That issue has been briefed and would be ripe for decision, although the court might want to ask for additional arguments in light of whatever the Supreme Court holds with respect to must carry. The district court could wait to issue a new judgment with respect to must carry itself until it resolves this last issue, but it is likely that the plaintiffs would mount a strong argument that such a delay would deprive them of their First Amendment rights. The best estimate of when an adverse decision would become effective is thus roughly a month after the Court hands down its decision.

Since the decision will come near the end of the Court's term, another possibility opens up. Rule 45 provides for an automatic stay of the mandate if a timely petition for rehearing is filed. Rule 44 allows 25 days after a decision within which to seek rehearing. Although petitions for rehearing are hardly ever granted, the Court usually does not act on them over the summer.[2] If rehearing were sought after the term ended and the Court did not act on the petition until its next session, that would delay the actual end of must carry until October.

There are reasons why a delay of several months would be beneficial. Most television stations appear to have elected must carry on at least some of the cable systems in their markets. Even if those cable systems want to

[1] Daniels made a separate argument that, regardless of Congress' intentions, the requirement of obtaining retransmission consent also violates cable operators' First Amendment rights. That issue was segregated from the must carry arguments by the three-judge court and was heard by Judge Jackson sitting on his own. He rejected Daniels' retransmission consent argument. That decision is now on appeal to the D.C. Circuit which has held the case in abeyance pending the Supreme Court's decision in the must carry case.

[2] This is not always the case. The Court denied a petition for rehearing in *Metro Broadcasting, Inc. v. FCC*, 497 U.S. 547 (1990), in August, and it acted on other petitions during that summer as well.

keep carrying their signal, the station and the cable system must enter into a retransmission consent agreement. Also, we understand that some retransmission consent agreements provide that they will expire if must carry is held unconstitutional, and those agreements would have to be renegotiated as well. A longer period before the must carry rules are actually vacated would permit a more orderly transition period for cable systems and broadcasters. Thus, if we do not have a decision by early June, it may be worthwhile exploring with the Solicitor General the option of seeking rehearing.

Regulatory Initiatives

The second set of issues relates to what steps the Commission can take to help ensure continued carriage of broadcast television stations on cable systems, or at least to delay cable systems' dropping local stations. (With the commencement next year of two new broadcast networks, a station that can keep being carried for some additional months may be in a position to become an affiliate of one of those networks and secure its future carriage through exclusive rights to new programming.)

We think that the Commission should consider beginning a proceeding in which it could assemble evidence concerning carriage patterns following the elimination of must carry rules and consider regulatory changes that could help ensure broadcast station carriage. A notice of inquiry could initiate an FCC study of post-decision carriage proceedings, either by asking responding parties to supply evidence of carriage patterns or, more effectively, by the Commission's conducting its own survey of cable systems, much as it did in 1988. It is likely that there would be Congressional support for such a study. Among the regulatory initiatives on which the Commission might consider seeking comments are

- An expanded "negative must carry" rule. When the Commission modified the network-cable cross-ownership

rule, it provided that a station denied carriage on a network-owned cable system could file a complaint with the Commission. If, after investigation, the FCC determined that carriage was denied for anticompetitive reasons, and the station made a showing of significant harm, the Commission would order the station to be carried. *Common Ownership of Cable Television Systems and National Television Networks*, 7 FCC Rcd. 6156, 6170-73 (1992), *recon. denied*, 8 FCC Rcd. 1184 (1993). This would provide stations with a remedy similar to that which might be available in an antitrust suit, but with lower costs and without many of the difficulties involved in antitrust litigation, such as establishing a market definition, etc. You should note that one court in an antitrust suit involving carriage decisions rejected a cable company's First Amendment argument against imposing antitrust remedies for anticompetitively motivated denials of carriage. *See Sunbelt Television, Inc. v. Jones Intercable, Inc.*, 795 F. Supp. 333 (C.D. Cal. 1992).

- Franchise agreement requirements concerning carriage of local signals. A number of local cable franchise agreements require the cable system to carry the signals of all local television stations. The 1984 Cable Act permitted franchise authorities in post-Act agreements to require "broad categories of video programming," but barred requirements "for video programming or other information services." 47 U.S.C. § 544(b). There have been few cases interpreting this language. The Commission could seek comments on whether the Act permits local authorities to include in post-'84 agreements a provision requiring carriage of all local television stations. One issue that would have to be addressed in connection with such a requirement is how it could be reconciled with retransmission consent, since it may be difficult to require cable systems to reach agreements with local stations. One possibility would be a provision mandating carriage of any local

station that agreed to be carried without compensation, a provision that would have the effect of replicating the 1992 Act's must carry/retransmission consent election.

- Expanded program exclusivity rights. Perhaps the best way to improve local stations' ability to negotiate for cable carriage would be changes in the FCC's program exclusivity rules that would give stations exclusive rights to programming over a greater area. Currently, the network non-duplication and syndicated exclusivity rules are limited by geographic area, and exceptions exist for other stations which are significantly viewed or which place a Grade B signal over a cable community. One possible change which the Commission could consider would be expanding the geographic limits for which stations could negotiate exclusive programming rights to include their entire television market. A rulemaking proceeding involving these rules has been pending for some time. NAB has opposed such changes in that proceeding because some small market television stations believed that they would be "over-shadowed" by stations in adjacent larger markets. Nonetheless, the Commission might wish to ask for further comment on these issues in the context of a post-must carry environment.

- Leased access. Judge Williams' dissenting opinion in the district court suggested that expanded leased access requirements for cable systems would pass constitutional muster if the right to lease capacity were equally available to all unaffiliated programmers. The number of channels that cable operators must provide for leased access is set in the Cable Act. One question the Commission might ask in a notice, depending on whether the Supreme Court's opinion is consistent with Judge Williams' views, is whether it should recommend to Congress that the leased access requirement be expanded. Other possible statutory changes could include: establishing either carriage priorities or more

favorable rates for local television stations,[3] requiring cable operators to provide unaffiliated programmers rates and conditions at least as favorable as they provide to affiliated program suppliers, changing the burden of proof required to establish a violation of the leased access provisions to put the burden on the cable system, or providing enhanced damages for violations. The Commission on its own could change the rate formula it established for leased access. Under the rules adopted after the 1992 Act, a cable operator can charge for leased access channels the *maximum* rate that it is deemed to charge any unaffiliated programmer on a non-leased access channel. This could be changed to a cost-based formula which would likely lead to lower rates. The Commission could also ask for comments on whether it should establish channel and tiering requirements for leased access channels,[4] or explicit provisions barring discrimination against competitors.

- Antennas. The Commission could ask whether there are steps it could take to enhance consumers' ability to receive local signals over the air in the event that cable systems decline to carry them. The repeal of the A/B switch education rules in the 1992 Act may make it difficult to revive those types of rules, but the Commission could look into the possibility of preempting local zoning rules that bar outside antennas if outside antennas are needed to receive signals not carried on

[3] While creating a preferential status for local stations might be subject to some of the same constitutional objections as the must carry requirements were, the established value that carriage of local stations can bring to cable systems might serve as a non-content based rationale for such rules.

[4] Under the rate regulation provisions of the 1992 Act, all local television signals must be carried on the basic tier. Assuming that this requirement would be upheld, that would presumably apply as well to local signals carried under a leased access arrangement. Whether that understanding is correct could also be explored in a notice of inquiry.

cable systems serving a community. As you may be aware, NAB recently asked for proposals to develop better set-top antennas. The Commission could also examine requiring such enhanced antennas on new television receivers.

- Modifying or eliminating the compulsory license. In 1990, the Commission concluded that, in the absence of must carry requirements, the cable compulsory copyright license created an imbalance in the video market. *Competition, Rate Regulation and the Commission's Policies Relating to the Provision of Cable Television Service*, 5 FCC Rcd. 4962, 5041-42 (1990). If must carry rules cannot be imposed, it may be appropriate to consider whether the Commission should recommend abolition or modification of the compulsory license. It is not clear to us how elimination of the license would in fact aid those stations most in need of must carry, but the issue would certainly be appropriate for the Commission's consideration.

There may be other possible avenues for inquiry, but these suggestions cover the main approaches that we think could help ameliorate carriage problems in the event there are no must carry rules. As important as the substance of any inquiry may be, we think that the Commission's expression of concern about the issue and about the importance of continued carriage of local stations will have the most significance in avoiding widespread disruption as cable systems and television stations move to a post-must carry environment.

Please let us know if you have any questions or if we can provide any other information.

Best wishes.

Sincerely yours,

/s/ Henry L. Baumann
HENRY L. BAUMANN

/s/ Jack N. Goodman
JACK N. GOODMAN

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.K

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 243]

September 30, 1994

[PK Logo] CABLE TV ADVERTISING

Accelerated MSO consolidation this year is all about "clustering." Enhanced growth prospects for advertising sales is a driving force behind the rush by cable operators to solidify control of entire markets and regions.

The five-ten MSOs here for the long haul—those spending capital to combat competitors and build the superhighway—have grown weary of fractious alliances with fiercely independent geographic neighbors that attempt to "unify" markets and create one-stop cable shopping for national spot advertisers.

The serious players need substantial regional centers to achieve scale economies, amortize overhead and build critical mass for a host of activities—telephony, interactive TV, customer service, equipment purchases—beyond ad sales and marketing, two of clustering's more obvious benefactors.

So top MSOs are acquiring adjacent systems to gain or strengthen market dominance. Clustering threatens to push the terms ad "interconnects" and marketing "co-ops" into the history books; or, at least trim partnerships to two or three different owners, instead of five or 10 or more today.

The 4.2 mil.-subscriber joint venture announced Sept. 12 by Time Warner and Newhouse forms significant clusters in Florida, North Carolina and New York state. Time Warner now controls 26 clusters of 100K or more subs.

Some will be jvs, some outright acquisitions, some system swaps, but clusters-oriented deals will continue to get done.

TCI chief John Malone has predicted today's field of more than 100 MSOs could eventually consolidate into

five behemoths. About the only thing that can halt the speeding train in its tracks is government intervention.

The opportunity to elevate its presence in markets such as Dallas and Kansas City motivated TCI's purchase of TeleCable, announced in August.

Budding marriage partners aren't difficult to identify in the clustering game. TCI, with a large stake in the nation's capital via District Cablevision, is on the list of likely buyers for two Washington, DC, systems covering 240K subs and reportedly being shopped by Southwestern Bell.

TCI and eventual system seller Viacom have similar clout in two major markets that enjoy nearly 70% cable penetration of TV households: #5 San Francisco/Oakland/San Jose and #13 Seattle/Tacoma.

Various financial obstacles may prevent TCI from buying those Viacom systems and closing the loop in those markets. For now, TCI/Viacom ad sales partnerships in S.F. and Seattle—Bay Cable Advertising and Northwest Cable Advertising, respectively—are among the industry's most successful.

The clustering trend stretches beyond the 10-20 biggest TV markets, although these have the best shot at national spot sales explosions.

Look for more cable operators to obtain commanding positions in mid-size markets, some of which are already home to prosperious stand alone local ad sellers, such as KBLCOM in San Antonio, TX, and Prime in Las Vegas.

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE
VOLUME VII.K

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 266]

TOP 100 MSOS AS OF OCTOBER 1, 1994

RANK	MSO NAME	TOT SUBS	TBS SUBS	%	CNN SUBS	%	HLN SUBS	%	TNT SUBS	%	TCM SUBS	%	MOV SUBS	%
1	SATELLITE SERVICES INC													
	TELE-COMMUNICATIONS INC	10,060,481	8,858,918	88%	9,677,284	96%	8,658,622	86%	9,654,889	96%	681,088	7%	0	0%
	AFFILIATED MSOS:													
	BRESNAN	180,000	187,072	99%	180,348	95%	186,072	94%	188,478	94%	87,320	29%	0	0%
	COLUMBIA ASSOCIATES	255,214	255,211	100%	247,855	97%	247,855	97%	247,858	97%	112,500	44%	0	0%
	INTERMEDIA	748,000	736,844	98%	726,887	97%	851,283	87%	718,738	96%	41,488	6%	74,183	10%
	LENFEST	883,847	878,881	99%	887,885	98%	758,188	86%	876,428	99%	43,245	5%	0	0%
	TCI/US CABLE	213,120	204,300	96%	205,872	97%	199,282	94%	202,718	95%	2,738	1%	0	0%
	TWX	811,831	556,948	91%	800,031	98%	489,428	60%	595,758	97%	0	0%	0	0%
	OTHERS	741,334	706,881	95%	704,381	95%	624,718	84%	703,858	95%	112,384	15%	35,855	5%
	***TOTAL SATELLITE SERVICES INC	13,714,896	13,188,884	96%	13,221,633	96%	11,816,148	86%	13,187,403	96%	1,051,343	8%	109,858	1%
2	TIME WARNER CABLE	7,018,832	6,458,182	92%	6,848,954	98%	6,543,445	93%	6,661,782	95%	1,736,085	25%	16,028	0%
3	CONTINENTAL CABLEVISION	3,182,180	3,088,988	96%	3,137,881	98%	3,055,278	96%	3,108,845	98%	959,605	30%	0	0%
4	COMCAST CORPORATION	2,841,442	2,823,818	96%	2,838,588	100%	2,516,924	95%	2,836,871	100%	182,777	6%	83,873	3%
5	CABLEVISION SYSTEMS CORP	2,831,082	2,465,344	87%	2,470,767	98%	1,179,084	47%	2,415,726	95%	527,531	21%	0	0%
6	COX CABLE COMMUNICATIONS	1,843,482	1,843,482	100%	1,833,468	99%	1,833,468	99%	1,833,468	99%	506,641	27%	59,888	3%
7	ADELPHIA COMMUNICATIONS CORP.	1,443,828	1,404,387	97%	1,406,731	97%	1,138,338	78%	1,382,186	96%	389,333	27%	128,312	9%
8	NEWHOUSE BROADCASTING	1,387,880	1,383,331	99%	1,388,888	99%	1,388,241	99%	1,387,883	99%	266,068	19%	18,488	1%
9	JONES PROGRAMMING SERVICES INC	1,348,878	1,328,418	99%	1,283,328	96%	1,286,874	96%	1,282,655	96%	382,073	28%	0	0%
10	TCI COMMUNICATIONS(OP)	1,248,728	1,186,488	95%	1,188,821	96%	1,145,212	92%	1,183,383	95%	84,858	6%	12,087	1%
	TOTAL TOP 10 MSOS	33,384,341	34,843,874	96%	35,431,138	97%	31,795,815	87%	35,888,383	96%	6,077,214	17%	428,428	1%
11	CABLEVISION INDUSTRIES	1,283,827	1,112,075	92%	1,282,883	100%	1,072,534	89%	1,183,686	98%	84,257	7%	0	0%
12	BARAKONS COMMUNICATIONS, INC.	1,118,483	981,814	88%	1,082,783	98%	781,178	70%	1,081,180	97%	43,138	4%	88,238	8%
13	WACOM CABLEVISION	1,188,488	1,088,888	95%	1,088,488	96%	952,571	88%	1,088,488	96%	0	0%	0	0%
14	CROWN CABLE INC.	874,288	864,841	99%	838,788	96%	858,271	87%	838,938	96%	212,384	22%	0	0%
15	FALCON COMMUNICATIONS	842,888	783,878	94%	781,848	94%	628,582	75%	828,784	74%	35,838	4%	0	0%
16	CENTURY COMMUNICATIONS CORP.	824,888	884,878	83%	788,484	82%	888,583	81%	748,228	98%	121,888	15%	0	0%
17	COLONY COMMUNICATIONS, INC.	788,214	858,882	88%	748,714	97%	884,427	78%	718,724	83%	38,288	8%	12,888	2%
18	PRIME CABLE CORPORATION	743,888	741,841	100%	721,858	97%	718,448	97%	707,388	95%	48,818	7%	0	0%
19	SCRIPPS HOWARD INC.	708,883	708,883	100%	782,138	98%	883,784	97%	888,453	98%	88,241	8%	1,238	0%
20	TELE-CABLE CORPORATION	887,388	887,388	100%	883,878	98%	883,878	98%	582,278	83%	148,484	21%	0	0%
21	KELLOGG INCORPORATED	884,238	823,883	98%	888,838	98%	845,872	92%	848,822	97%	8,748	1%	3,781	1%
22	MACLEAN HUNTER CABLE TV, INC.	827,188	827,188	100%	828,158	100%	828,158	100%	828,158	100%	0	0%	0	0%
23	POST NEWSWEEK CABLE, INC.	488,834	438,482	98%	484,848	93%	422,188	87%	438,218	98%	18,482	2%	0	0%
24	TCA MANAGEMENT COMPANY	488,838	441,438	98%	488,828	100%	318,485	88%	418,783	91%	18,433	4%	0	0%
25	MEA TIMEDIA CABLEVISION, INC.	412,832	407,784	98%	388,484	98%	387,788	94%	388,182	98%	93,318	23%	0	0%
	TOTAL TOP 25 MSOS	47,828,178	48,882,387	95%	48,838,784	97%	41,851,411	87%	48,788,833	98%	7,888,138	15%	843,248	1%
26	RIFKIN & ASSOCIATES	374,783	374,873	100%	384,883	98%	358,283	93%	351,888	94%	138,888	37%	0	0%
27	TRIAX COMMUNICATIONS	388,838	347,388	88%	348,877	84%	187,774	48%	388,828	84%	34,888	9%	4,381	1%
28	WESTERN COMMUNICATIONS INC	311,828	238,783	77%	311,828	100%	318,888	100%	311,828	100%	0	0%	0	0%
29	C-TEC CABLE SYSTEMS	274,883	278,771	98%	283,438	98%	225,848	87%	282,478	98%	88,872	18%	43,278	18%
30	SERVICE ELECTRIC CABLE TV, INC.	248,878	291,278	87%	248,878	100%	245,878	100%	245,878	100%	85,388	38%	0	0%
31	GREATER MEDIA	228,328	187,882	88%	222,888	97%	205,828	90%	222,888	97%	78,882	33%	0	0%
32	BBC MEDIA VENTURES, INC.	228,817	228,817	100%	228,417	98%	225,417	98%	228,417	98%	178,887	78%	0	0%
33	MEDIA GENERAL CABLE OF FAIRFAX	221,483	221,483	100%	221,483	100%	221,483	100%	221,483	100%	0	0%	0	0%
34	WOMETCO CABLE CORPORATION	217,488	217,488	100%	217,488	100%	217,488	100%	217,488	100%	0	0%	0	0%
35	MARCUS CABLE COMPANY, LP	214,478	203,287	95%	207,818	97%	187,778	92%	207,818	97%	188,188	88%	288	0%
36	MEA TIMEDIA CABLE TV CORP.	211,878	207,481	98%	211,878	100%	182,788	87%	207,481	98%	88,837	28%	1,488	1%
37	HARRON COMMUNICATIONS CORP.	208,848	208,848	100%	208,843	100%	202,888	97%	207,888	99%	88,244	42%	0	0%
38	ARMSTRONG GROUP OF COMPANIES	188,388	188,388	100%	188,388	100%	183,813	98%	188,388	100%	21,288	11%	0	0%
39	ELLIOTT CABLE INC.	188,383	188,383	100%	182,881	98%	182,881	98%	182,881	98%	87,888	38%	0	0%
40	NORTHLAND CABLE TELEVISION	188,388	188,211	100%	184,138	97%	182,247	98%	188,842	97%	33,827	21%	4,885	3%

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TOP 100 MSOS AS OF OCTOBER 1, 1994

41 UNITED VIDEO MANAGEMENT INC	187,238	181,183	96%	181,183	96%	115,472	73%	138,134	88%	0	0%	0	0%
42 AMERICAN CABLE ENT PROD CO INC	185,568	185,568	100%	182,424	98%	132,625	85%	148,602	96%	11,058	7%	8,988	4%
43 BUCKEYE CABLEVISION, INC.	148,828	148,828	100%	148,478	100%	149,478	100%	148,478	100%	120,903	81%	0	0%
44 PENCOR SERVICES, INC	137,183	137,183	100%	137,183	100%	135,902	99%	137,183	100%	871	0%	27,837	20%
45 BOOTH COMMUNICATIONS	134,144	113,927	85%	130,478	97%	130,478	97%	130,478	97%	0	0%	0	0%
46 FANCH COMMUNICATIONS	124,887	124,556	100%	121,772	98%	66,725	54%	114,510	92%	0	0%	0	0%
47 PRESTIGE CABLE TV, INC.	117,421	117,421	100%	115,273	98%	115,273	98%	115,273	98%	5,708	5%	0	0%
48 WEHCO VIDEO INC.	118,748	107,643	97%	105,658	95%	86,978	79%	105,658	95%	3,000	3%	3,988	3%
49 COASTAL COMMUNICATIONS	108,267	108,267	100%	105,745	97%	100,118	92%	100,118	92%	0	0%	25,088	23%
50 DOUGLAS COMMUNICATIONS CORP II	89,438	89,438	100%	88,820	99%	22,212	22%	83,308	84%	5,808	6%	0	0%
51 BUFORD GROUP, INC.	86,718	85,183	98%	85,805	100%	70,387	82%	83,588	98%	6,748	8%	0	0%
52 HELICON CORPORATION	84,498	84,498	100%	84,403	100%	83,785	99%	82,993	98%	99	0%	0	0%
53 JAMES CABLE PARTNERS, L.P.	80,025	80,025	100%	80,025	100%	69,456	87%	74,488	93%	31,869	39%	0	0%
54 CHAMBERS COMMUNICATIONS CORP.	78,854	78,854	100%	78,854	100%	48,568	63%	78,488	100%	0	0%	0	0%
55 MIDCONTINENT CABLE COMPANY	74,488	74,488	100%	74,327	100%	32,488	44%	74,488	100%	30,107	40%	0	0%
56 MASADA CORPORATION	87,087	87,087	100%	87,087	100%	85,078	82%	82,231	93%	35,837	84%	0	0%
57 CLASSIC CABLE	86,888	80,343	90%	86,577	100%	35,481	63%	87,601	86%	8,717	10%	0	0%
58 ST. JOSEPH CABLEVISION	85,788	81,328	78%	85,788	100%	85,978	85%	85,788	100%	8,348	13%	0	0%
59 O S COMMUNICATIONS INC	85,848	14,227	22%	83,838	07%	83,538	97%	83,538	97%	287	0%	0	0%
60 STAR CABLE ASSOCIATES	84,888	84,881	100%	83,788	98%	81,072	78%	82,733	97%	0	0%	2,847	4%
61 OMEGA COMMUNICATIONS	83,888	83,837	100%	83,282	99%	80,805	95%	83,253	99%	41,212	85%	0	0%
62 BENCHMARK COMMUNICATIONS L.P.	81,842	87,788	83%	81,882	100%	81,882	100%	81,381	99%	88,851	94%	0	0%
63 GALAXY CABLEVISION	88,228	88,118	100%	88,378	99%	41,717	78%	40,885	89%	0	0%	0	0%
64 STATE CABLE TV CORP	88,824	88,844	100%	87,712	98%	87,712	98%	87,712	98%	0	0%	0	0%
65 DORSEY MEDIA GROUP	88,283	87,884	99%	87,854	98%	87,854	98%	87,854	98%	28,717	48%	0	0%
66 ROCK ASSOCIATES	87,844	87,328	99%	81,758	89%	81,588	89%	48,882	84%	18,788	29%	0	0%
67 MCDONALD GROUP, INC.	82,388	81,833	98%	81,833	98%	80,815	97%	48,478	94%	38,888	74%	0	0%
68 RAYSTAY CO.	82,331	43,311	83%	48,888	93%	43,488	83%	80,854	97%	23,274	44%	0	0%
69 CABLEAMERICA CORP.	82,131	82,131	100%	81,848	99%	48,878	98%	48,287	93%	27,887	82%	23,445	45%
70 HORTEL CABLE ASSOCIATES	48,188	48,188	100%	48,777	97%	48,777	97%	48,777	97%	0	0%	0	0%
71 THE WORLD COMPANY	47,128	47,128	100%	47,128	100%	47,128	100%	47,128	100%	0	0%	0	0%
72 EASTERN CONNECTICUT CABLE TV	48,288	48,288	100%	48,888	100%	1,342	3%	43,738	97%	0	0%	0	0%
73 COMMUNITY TV CORPORATION	48,134	38,843	88%	48,134	100%	18,838	44%	48,134	100%	0	0%	0	0%
74 ETAN INDUSTRIES/CABLE MGT ASSO	44,877	44,877	100%	44,877	100%	18,818	44%	43,877	98%	0	0%	0	0%
75 CATAWBA SERVICES, INC.	43,838	43,838	100%	32,883	77%	32,388	75%	32,883	77%	30,888	72%	0	0%
76 MARBLETON CABLE TV INC.	40,388	40,388	100%	40,388	100%	40,388	100%	38,888	96%	888	2%	0	0%
77 ALEXICOM, INC.	40,388	40,388	100%	40,388	100%	40,388	100%	40,388	100%	0	0%	0	0%
78 C4 MEDIA CABLE SOUTHEAST, LP	38,224	31,824	83%	38,224	100%	33,348	87%	28,878	78%	8,848	25%	0	0%
79 FAIRBANKS COMMUNICATIONS INC.	38,113	38,113	100%	38,113	100%	38,113	100%	38,113	100%	8,878	18%	0	0%
80 CABLEVISION OF TEXAS	37,782	37,428	99%	37,782	100%	3,382	9%	21,238	56%	1,488	4%	1,887	3%
81 MOFFAT INTERNATIONAL CORP.	37,378	37,378	100%	37,378	100%	37,378	100%	37,378	100%	0	0%	0	0%
82 TELESAT CABLEVISION,INC.	36,733	36,733	100%	36,733	100%	35,733	100%	28,418	80%	27,881	77%	34,878	97%
83 BLAIR COMMUNICATIONS, INC	33,883	33,428	99%	33,488	100%	22,841	68%	21,888	64%	3,883	9%	0	0%
84 HARMON CABLE COMMUNICATIONS	33,413	32,788	98%	32,788	98%	28,148	87%	32,788	98%	0	0%	0	0%
85 LEONARD COMMUNICATIONS	33,273	33,042	99%	31,874	93%	21,488	65%	30,751	92%	0	0%	3,838	11%
86 VANTAGE CABLE ASSOCIATES, INC.	30,878	30,132	98%	28,918	97%	18,428	63%	30,288	98%	0	0%	0	0%
87 AMERICABLE INTERNATIONAL INC.	29,884	29,884	100%	29,884	100%	27,378	93%	28,888	97%	18,283	88%	0	0%
88 W.K. COMMUNICATIONS	29,288	29,288	100%	28,883	97%	22,834	77%	28,388	97%	2,188	7%	0	0%
89 CABLESOUTH,INC.	28,881	28,881	100%	27,831	96%	27,831	96%	27,831	96%	0	0%	0	0%
90 FIRST CAROLINA CABLE, TV, L.P.	28,784	28,884	99%	28,881	99%	28,388	99%	20,188	70%	0	0%	12,878	45%
91 PHOSPHI CABLE INCORPORATED	28,888	28,832	100%	27,818	97%	11,888	42%	23,771	83%	3,238	11%	10,787	37%
92 ADVOCATE COMMUNICATIONS DBA	28,788	28,378	99%	28,378	99%	28,378	99%	28,378	99%	28,378	99%	0	0%
93 CABLE USA	28,832	23,788	89%	28,832	100%	18,888	78%	22,431	84%	0	0%	0	0%
94 CABLE TV COMPANY	28,388	28,318	100%	28,888	99%	24,283	87%	28,448	98%	0	0%	0	0%

TOP 100 MSOS AS OF OCTOBER 1, 1994

95 ACI MANAGEMENT INC.	26,221	25,868	99%	26,041	99%	18,820	72%	21,864	83%	112	0%	0	0%
96 HORIZON CABLEVISION	25,319	25,319	100%	25,319	100%	25,319	100%	25,319	100%	4,438	17%	0	0%
97 PEGASUS CABLE TELEVISION	26,248	21,713	86%	26,245	100%	26,245	100%	23,596	93%	8,502	36%	0	0%
98 NEW ENGLAND CABLEVISION	24,018	24,018	100%	23,261	97%	23,261	97%	23,261	97%	0	0%	0	0%
99 DIVERSIFIED COMMUNICATIONS	23,284	7,769	33%	23,117	99%	23,117	99%	23,117	99%	817	4%	0	0%
100 EASTERN TELECOM CORP.	23,149	22,897	99%	22,883	99%	22,883	99%	22,883	99%	0	0%	4,232	18%
TOTAL TOP 100	58,618,266	52,438,178	95%	53,567,893	97%	47,788,414	87%	52,530,031	95%	8,584,758	16%	781,534	1%
TOTAL CABLE	57,918,520	56,276,823	98%	56,333,322	97%	48,816,020	86%	54,867,488	95%	8,108,930	16%	858,728	1%
TOP 10 AS % OF CABLE	63%	63%		63%		64%		64%		67%		90%	
TOP 25 AS % OF CABLE	83%	82%		83%		84%		83%		77%		63%	
TOP 100 AS % OF CABLE	86%	86%		95%		96%		96%		84%		87%	

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' JOINT SUBMISSION OF ADDITIONAL EVIDENCE IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT

DOCUMENTARY EVIDENCE

VOLUME VII.K

* * * *

Dated: May 26, 1995

* * * *

[Exhibit 242]

[PK Logo] CABLE TV ADVERTISING

$10 bil. in gross ad billings by the year 2000—that's the ambitious goal set by the Cabletelevision Advertising Bureau (CAB) and its new pres./CEO Joseph Ostrow, the veteran ad agency exec.

Gazing into our current crystal ball, we think the industry will miss the target by one year. Exclusive Paul Kagan Assoc., Inc. projections call for gross cable ad revenues to surpass $10 bil. in 2001 (see table below).

The forecast envisions total cable ad sales—network, local/spot and regional sports—doubling over the next six years, from an estimated $4.6 bil. in 1994 to $9.2 bil. in 2000.

CABLE TV ADVERTISING BILLINGS (1980-2004)

	—Billings in $ millions—				Percent Change			
Year	Network	Local/ Spot	Regional Sports	Total	Network	Local/ Spot	Regional Sports	Total
1980	$ 50	$ 8	—	$ 58	—	—	—	—
1981	105	17	$ 2	124	110%	113%	—	114%
1982	195	32	3	230	86	88	50%	85
1983	331	60	5	396	70	88	67	72
1984	487	99	9	595	47	65	80	50
1985	634	167	14	815	30	69	56	37
1986	748	195	22	965	18	17	57	18
1987	891	268	33	1,192	19	37	50	24
1988	1,135	374	52	1,561	27	40	58	31
1989	1,461	496	74	2,031	29	33	42	30
1990	1,802	634	103	2,539	23	28	39	25
1991	2,046	710	118	2,874	14	12	14	13
1992	2,338	862	140	3,340	14	21	19	16
1993	2,749	1,050	164	3,963	18	22	17	19
1994	3,166	1,267	174	4,607	15	21	6	16
1995	3,609	1,507	195	5,311	14	19	12	15
1996	4,078	1,763	219	6,060	13	17	12	14
1997	4,526	2,024	244	6,794	11	15	11	12
1998	5,023	2,287	271	7,581	11	12	10	12
1999	5,515	2,552	299	8,366	10	12	10	10
2000	6,011	2,884	336	9,231	9	13	12	10
2001	6,534	3,259	376	10,169	9	13	12	10
2002	7,057	3,643	417	11,117	8	12	11	9
2003	7,621	4,040	460	12,121	8	11	10	9
2004	8,215	4,438	507	13,160	8	10	10	9

© 1994 Paul Kagan Associates, Inc. estimates.

The Future: Hard to Predict But Always Worth the Try

Cable's brightest potential lies in the local/spot business —with the emphasis on spot. Local/spot accounts for 27%-28% of all cable TV ad revenue today, but its piece of the pie should grow to 34% over the next 10 years.

Fiber-optic networks enabling the digital insertion of commercials at the set-top box (instead of the system headend) will open doors for household-addressable interactive TV ads that take advantage of local/spot cable's geographic, demographic and psychographic targetability.

The number of cable homes with this capability should become substantial enough to attract incremental ad spending around the turn of the century.

Technological bells and whistles aside, the key factor propelling local/spot growth will continue to be cable's eternal quest for a "fair share" of TV ad dollars commensurate with its audience share.

Ad-supported cable's viewing share in all TV households (including non-cable homes) is currently about 26%.

Consider that advertisers this year will spend about $8.5 bil. on broadcast spot TV while tossing some $200 mil. to national spot cable. Cable is thus capturing just above 2% of an $8.7 bil. pool of spot TV dollars.

Under a conservative growth scenario, broadcast spot TV spending should reach $13 bil. by 2003. Assuming national spot cable expenditures rise to $1 bil.—five times their curert size—they will still represent a scant 7% of a $14 bil. spot TV war chest.

By then, ad-supported cable viewing share in all TV homes should be at least 30%-35%.

Another way to look at the spot business: At a billion dollars in 2003, spot cable would account for about one-quarter of gross local/spot cable ad sales, up from 16%

today. Contrast this with spot's 40%-50% share of ad revenue at most TV stations.

Network cable ad sales could dip to single-digit gains by 2000—but that translates into an annual clip of $500 mil. in new billings.

Aided by new distribution vehicles such as DBS, wireless cable and video dialtone, the 12-15 largest incumbent networks could reach 75% or more of U.S. TV households 10 years from now, up from 60%-67% currently.

Although new networks and hundreds of channels of video-on-demand options promise to further fragment the TV audience, the enormous distribution advantage the incumbents enjoy over cable's newcomers will become increasingly important to national TV advertisers.

A CLOSER LOOK AT AD AGENCY CABLE SPENDING

A quick glance at the table on P. 3 suggests a significant slowdown in combined cable spending by major ad agencies—to an est. 5% in 1994, the fifth straight year the growth rate has declined. It's a little misleading.

First, cable outlays at Ammirati & Puris-Lintas (formerly Lintas USA) are expected to plummet to $55 mil. this year, after shooting from $13 mil. in 1987 to $100 mil. in 1993.

The main reason for the decline is that client General Motors this year began directly placing many cable buys. GM is expected to spend upward of $75 mil. on network cable in 1994.

Second, the $1.4 bil. in cable spending by surveyed agencies this year represents only 44% of the $3.17 bil. in projected 1994 gross network cable billings. Clearly, many additional agencies are buying lots of cable.

A list of ad agency contacts appears on P. 7.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS CITED IN TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MEMORANDUM OF LAW IN OPPOSITION TO DEFENDANTS' AND INTERVENORS' SUMMARY JUDGMENT MOTIONS AND IN FURTHER SUPPORT OF ITS SUMMARY JUDGMENT MOTION
VOLUME II, TABS 21-40

* * * *

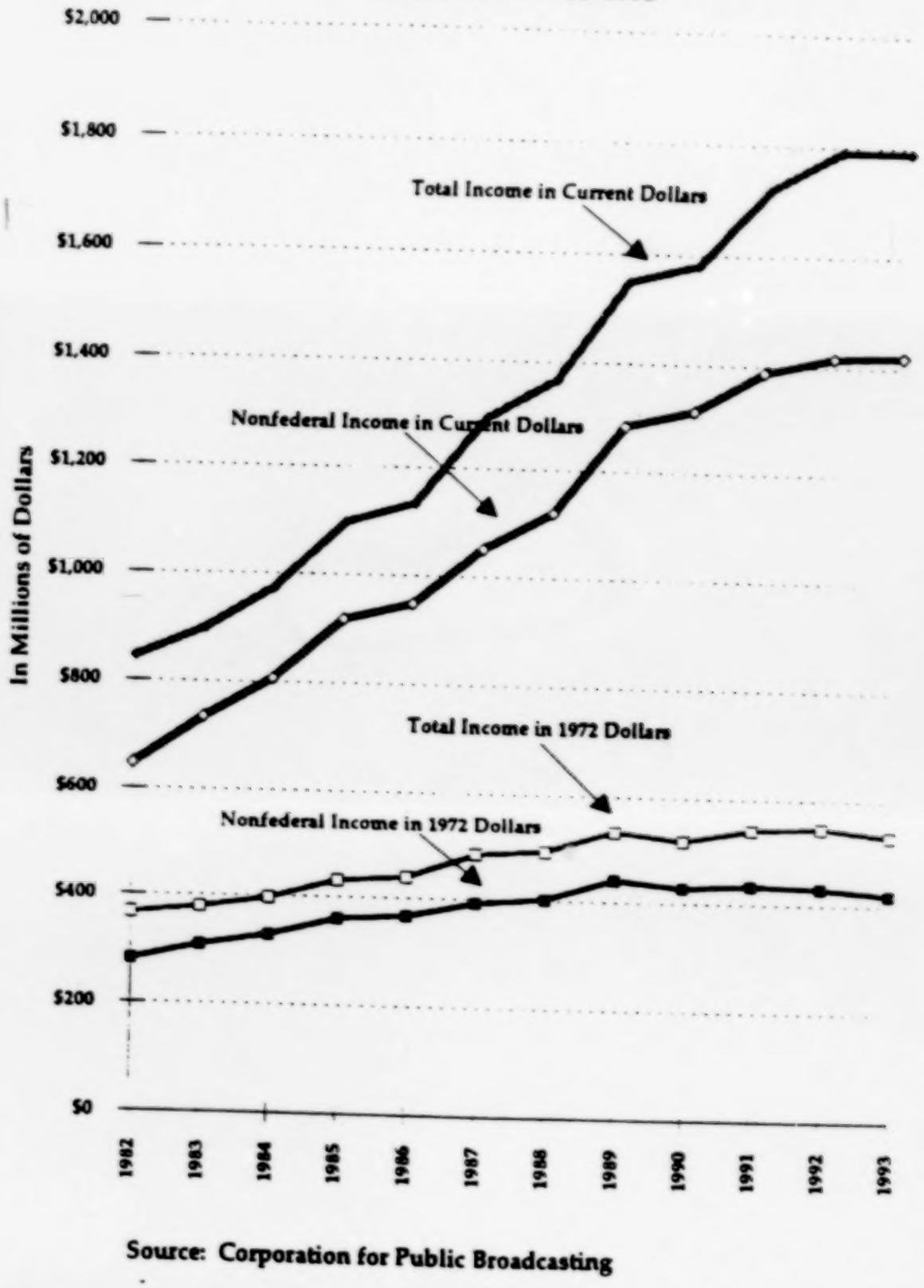
June 16, 1995

[Exhibit 25]

[CPB Logo]

PUBLIC BROADCASTING INCOME
FISCAL YEAR 1993

Figure 1
Total and Nonfederal Income in Current and 1972 Constant Dollars
Fiscal Years 1982-1993



Source: Corporation for Public Broadcasting

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXHIBITS TO AFFIDAVIT OF GREGORY M. LOSS IN SUPPORT OF TIME WARNER ENTERTAINMENT COMPANY, L.P.'S MOTION FOR SUMMARY JUDGMENT

VOLUME III

* * * *

May 26, 1995

[Exhibit 35]

[PK Logo]

THE KAGAN MEDIA INDEX

No. 96
February 24, 1995

PAUL KAGAN ASSOCIATES, INC.
126 Clock Tower Place
Carmel, California 93923-8734
(408) 624-1536 • Fax (408) 624-3225

* * * *

KAGAN MEDIA INDEX HISTORICAL DATA BASE
(year-end figures in millions)

		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
1	U.S. TV homes		84.90	86.53	87.67	89.21	90.88	91.64	90.85	91.96	93.06	93.92	94.93
2	Cable homes passed		60.52	64.72	69.40	73.10	77.20	82.82	86.01	88.40	89.40	90.60	91.60
3	Basic cable subs		34.20	36.70	39.70	42.63	45.69	49.31	51.74	53.40	55.20	57.20	58.80
4	Pay subscriber units		30.00	30.60	32.10	34.80	38.80	41.10	41.51	39.90	40.90	41.50	43.51
5	Expanded basic subscribers		5.30	5.35	6.60	4.00	3.70	3.80	12.15	14.20	15.00	27.00	28.08
6	Mini Pay Subs		----	----	----	----	----	----	----	3.20	3.70	4.80	5.60
7	Backyard subscribers		----	----	0.10	0.29	0.40	0.64	0.72	0.77	0.94	1.41	2.14
8	MDU SMATV subscribers		0.40	0.50	0.59	0.67	0.72	0.77	0.81	0.87	0.89	0.91	0.88
9	Wireless cable subscribers		0.44	0.28	0.25	0.19	0.21	0.14	0.19	0.21	0.31	0.40	0.58
10	Addressable homes		6.33	8.54	10.48	11.70	13.70	15.70	17.20	18.40	19.00	20.90	23.50
11	VCR households		16.90	27.50	38.10	47.60	55.30	61.30	66.00	71.20	76.10	80.50	84.50
12	Video shopping homes		0.80	2.20	9.60	32.10	42.70	46.50	51.40	54.50	57.00	60.20	62.40
13	Local cable ad homes		16.30	21.20	24.50	32.20	36.80	40.90	44.20	47.50	49.60	51.40	53.90
14	Cable network ad homes		27.10	28.20	30.70	34.90	38.90	44.50	48.60	52.00	54.10	56.00	57.70
15	Cassette unit sales		9.80	22.00	38.70	64.60	102.00	156.80	197.20	227.40	264.30	304.00	340.20
16	Cassette rental turns		702.70	1,222.80	1,830.20	2,439.60	2,898.40	3,120.20	3,297.00	3,378.40	3,578.20	3,745.90	3,879.90
17	Syndication lic. fee rev.	$	1,179	1,382	1,596	1,740	2,025	2,338	2,640	2,837	3,058	3,350	3,643
18	Cable network lic. fee rev	$	113	165	261	421	554	760	1,100	1,321	1,503	1,868	2,057
19	Local cable ad revenue	$	99	167	195	268	374	496	634	710	862	1,050	1,267
20	Cable network ad revenue	$	487	634	748	891	1,135	1,461	1,802	2,046	2,338	2,749	3,166
21	Regional sports ad rev.	$	9	14	22	33	52	74	103	118	140	164	174
22	Network ad revenue*	$	8,239	8,118	8,230	8,468	9,135	9,336	10,001	9,722	10,440	10,906	12,165
23	Barter ad revenue	$	400	515	587	763	916	1,040	1,173	1,309	1,272	1,386	1,511
24	Spot TV ad revenue	$	5,453	6,040	6,555	6,830	7,133	7,342	7,715	7,210	7,580	7,815	8,675
25	Local TV ad revenue	$	5,040	5,650	6,380	6,775	7,235	7,610	7,912	7,650	8,125	8,570	9,427
26	Spot radio ad revenue	$	1,195	1,330	1,345	1,318	1,410	1,535	1,593	1,536	1,443	1,566	1,738
27	Local radio ad revenue	$	4,300	4,795	5,205	5,602	6,065	6,432	6,685	6,480	6,715	7,310	8,078
28	Network radio ad revenue	$	306	346	393	374	381	426	433	440	396	423	460
29	Total cable TV ad rev.	$	595	815	965	1,192	1,561	2,031	2,539	2,874	3,340	3,963	4,607
30	Total TV ad revenue	$	19,132	20,323	21,752	22,836	24,419	25,328	26,801	25,891	27,417	28,677	31,778
31	Total radio ad revenue	$	5,801	6,471	6,943	7,294	7,856	8,393	8,711	8,456	8,554	9,299	10,276
32	Video shopping revenue	$	28	90	455	1,120	1,410	1,695	1,784	2,001	2,184	2,468	2,838
33	Cassette rental revenue	$	1,827	2,910	4,173	5,245	6,377	7,052	7,616	7,770	8,230	8,840	9,389
34	Cassette sales revenue	$	381	656	853	1,108	1,591	2,258	2,829	3,229	3,739	4,386	5,008
35	Total cassette revenue	$	2,208	3,566	5,026	6,354	7,967	9,310	10,445	11,000	11,969	13,226	14,398

© *1995 Paul Kagan Associates, Inc. estimates.*

(continued next page)

HISTORICAL DATA BASE (continued from P. 14)

		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
36	Theatrical film box office	$	3,346	3,106	3,145	3,454	3,641	4,233	4,477	4,496	4,610	4,997	5,172
37	Concession Rev.		----	----	1,051	1,167	1,294	1,471	1,531	1,555	1,638	1,807	1,861
38	Full serv. basic cable rev.	$	3,545	4,145	4,891	6,014	7,351	8,670	10,169	11,414	12,433	13,528	13,124
39	Expanded basic cable rev.	$	255	298	403	377	271	267	495	706	1,003	1,642	1,871
40	Pay revenue	$	3,370	3,727	3,872	4,112	4,491	4,896	5,105	4,893	4,918	4,493	4,786
41	Mini pay revenue	$	----	----	----	----	----	----	----	50	63	140	177
42	PPV revenue	$	18	25	37	86	174	214	253	378	404	556	668
43	Digital Audio Revenue	$	----	----	----	----	----	----	----	----	15	37	62
44	Cbl. operator HS rev.#	$	1	4	23	57	71	85	72	81	90	128	143
45	Installation revenue	$	134	177	253	241	257	282	289	269	278	289	---
46	Cbl. operator ad rev.#	$	86	139	192	264	313	496	628	721	852	984	1,256
47	Misc. Cable revenue	$	365	423	472	613	667	768	845	951	1,004	1,412	585
48	Total Cable Operator rev.	$	7,774	8,938	10,143	11,764	13,594	15,677	17,856	19,463	21,060	23,210	22,672
49	Daily newspaper cir. rev.	$	6,772	7,040	7,401	7,720	8,046	8,370	8,788	9,117	9,625	10,124	10,599
50	Daily newspaper ad revenue	$	22,320	23,936	25,740	28,140	29,906	31,126	31,118	29,399	29,733	31,064	33,228
51	Consumer Magazine cir. rev	$	5,663	6,111	6,326	6,874	7,664	7,962	8,091	8,095	8,579	9,208	9,613
52	Consumer Magazine ad reven	$	6,591	6,930	7,127	7,525	8,141	8,287	8,421	8,173	8,929	9,584	10,005
53	Domestic book revenue ●	$	11,599	12,611	13,333	14,671	16,111	18,036	19,043	20,052	21,636	23,087	24,616
54	Total publishing revenue	$	52,945	56,628	59,927	64,930	69,868	73,782	75,461	74,836	78,502	83,067	88,061
55	Total media revenue	$	93,034	101,341	111,050	121,951	133,806	144,437	152,645	153,928	162,893	174,820	185,964
56	Increase from previous year		14.1%	8.9%	9.6%	9.8%	9.7%	7.9%	5.7%	0.8%	5.8%	7.3%	6.4%
57	Total media revenue/home		$1,095.81	1,171.16	1,266.68	1,367.01	1,472.33	1,576.14	1,680.19	1,673.86	1,750.41	1,861.37	1,958.96
58	Increase from previous year		12.0%	6.9%	8.2%	7.9%	7.7%	7.1%	6.6%	-0.4%	4.6%	6.3%	5.2%
	REVENUE SEGMENT GROWTH RATES												
	Syndication lic. fee		17.2%	17.2%	15.5%	9.0%	16.4%	15.5%	[illegible]	7.5%	7.8%	9.5%	8.7%
	Total cable TV ad rev.		50.3	37.0	18.4	23.5	31.0	30.1	25.0	13.2	16.2	18.7	16.3
	Total TV ad revenue		16.2	6.2	7.0	5.0	6.9	3.7	5.8	(3.4)	5.9	4.6	10.8
	Total radio ad revenue		13.5	11.5	7.3	5.1	7.7	6.8	3.8	(2.9)	1.2	8.7	10.5
	Video shopping revenues		154.5	221.4	405.6	146.2	25.9	20.2	5.3	12.2	9.1	13.0	15.0
	Total cassette revenue		72.1	61.5	40.9	26.4	25.4	16.9	12.2	5.3	8.8	10.5	8.9
	Theatrical film box office		7.0	-7.2	1.3	9.8	5.4	16.3	5.8	0.4	2.5	8.4	3.5
	Total cable revenues		21.0	15.0	13.5	16.0	15.6	15.3	13.9	9.0	8.2	10.2	(2.3)
	Total publishing revenue		10.9	7.0	5.8	8.3	7.6	5.6	2.3	(0.8)	4.9	5.8	6.0
	Total media revenue		14.1	8.9	9.[illegible]	9.8	9.7	7.9	5.7	0.8	5.8	7.3	6.4

*• Network TV revenue from 1989 forward includes Fox Broadcasting. # These are not included in the total media line to avoid overstatement of revenue. ● Book Industry Study Group data. * 1995 Paul Kagan Associates, Inc., estimates.*

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' REBUTTAL DECLARATIONS AND EXHIBITS

VOLUME VIII

* * * *

Dated: June 16, 1995

* * * *

[Exhibit K]

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

STIPULATION AND SUPPLEMENTAL PROTECTIVE ORDER CONCERNING PRE-TRIAL USE OF A. C. NIELSEN DATA

WHEREAS, A. C. Nielsen Company ("Nielsen") provides certain information, reports and other data to its clients ("Nielsen Data"); and

WHEREAS, the Nielsen Data is provided to Nielsen's clients for limited uses pursuant to contracts; and

WHEREAS, the Nielsen Data is proprietary to Nielsen and has a continuing value to Nielsen in that Nielsen regularly receives income from the sale of the Nielsen Data to other clients that might be interested in the information contained in said Nielsen Data; and

WHEREAS, the parties hereto have requested that Nielsen waive certain of its rights and permit certain limited disclosure of Nielsen Data for use in this litigation; and

WHEREAS, the parties hereto certify that they are the only active participants in this litigation; and

WHEREAS, the parties hereto desire to go forward with the discovery and use in pre-trial proceedings in this litigation of relevant documents, without compromising the confidentiality and proprietary nature of the Nielsen Data; and

WHEREAS, the parties hereto desire to use the Nielsen Data in pre-trial proceedings in this litigation in such a way that the Nielsen Data will not be disclosed except in the manner described herein;

THEREFORE, IT IS HEREBY STIPULATED AND AGREED by and between the parties hereto and Nielsen that Nielsen hereby does provide a limited waiver of certain of its rights with respect to the use of certain Nielsen Data in legal proceedings in order to allow the parties hereto to use and disclose the Nielsen Data in pre-trial proceedings in this litigation, including motions for summary judgment, provided that the terms and conditions set forth below are complied with by the parties hereto:

1. The parties have agreed that they will not take any positions in this litigation that would require a determination of, or otherwise question or contest, the accuracy, effectiveness, reasonableness, or any other aspects of Nielsen's methodology. Nothing herein shall preclude an expert from testifying that Nielsen Data is ordinarily and customarily relied upon by experts in the broadcast and cable industries. Nevertheless, the parties shall be free to offer data which may differ from the Nielsen Data.

2. This Order shall govern the disposition of all data and/or materials prepared, compiled and produced by Nielsen which may be produced by any party in response to any discovery request or used by any party in pre-trial proceedings, including motions for summary judgment. This Order also shall govern all discovery responses that include Nielsen documents and data.

3. All Nielsen documents and copies thereof shall be marked and treated as "Confidential under the provisions of the Protective Order entered in this action on December 19, 1994 (the "Protective Order").

4. The parties hereto agree that neither Nielsen nor any Nielsen employee will be subpoenaed or required to testify in this action.

5. The attorneys for each party hereto shall provide Nielsen with an accurate listing of Nielsen Data produced by it to any other party after the date of entry of this Order, within 20 days of the provision of that Nielsen Data. If any party hereto already has produced documents containing Nielsen Data, it hereby certifiees that such documents were labeled and treated as "Confidential" under the provisions of the Protective Order.

6. The parties hereto agree that any Nielsen Data and/or summaries (including tables, charts, graphs, etc.) of information contained in such Nielsen Data disclosed pursuant to this Order, may not be utilized at trial without the entry of an Evidentiary Stipulation in the form attached hereto as Exhibit A.

7. The parties hereto waive the provisions of Paragraph 4 of the Protective Order with respect to the Nielsen Data.

8. The parties hereto agree that Paragraph 11 of the Protective Order shall be modified to provide that notice of any disclosure of Nielsen Data also shall be provided to Nielsen.

9. Nothwithstanding the provisions of Paragraph 15 of the Protective Order, the parties hereto agree that all Nielsen Data or other Nielsen information shall be filed with the Court under seal. The parties hereto will not seek to make such Nielsen Data public, and will use their respective best efforts to oppose any attempts by others to make such Nielsen Data public. The parties hereto will use their respective best efforts, including the filing of motions as contemplated in Paragraph 15 of the Protective Order, to maintain such Nielsen Data under seal; provided, however, that briefs, expert reports, and other submissions (or portions thereof) that refer only in summary form to the results of analysis of Nielsen Data, but do not contain any Nielsen Data, need not be filed under seal pursuant to this paragraph.

10. Notwithstanding the provisions of Paragraph 17 of the Protective Order, the parties hereto agree that, upon the termination of this action, all Nielsen Data shall be returned to the producing party or destroyed and a certificate of destruction shall be forwarded to the producing party; provided, however, that counsel for the parties are permitted to retain in their litigation files copies or briefs, expert reports, and other court submissions, and that all such documents containing Nielsen Data shall continue to be labeled and treated as "Confidential after the conclusion of this litigation.

11. The parties hereto agree that execution of this Stipulation does not impose upon Nielsen any obligation to provide data for use in this litigation.

12. The terms of this Order shall survive and remain in force and effect after the termination of this litigation and may not be altered or modified except by written stipulation executed by counsel for the parties hereto, and approved by Nielsen.

13. It is agreed among the parties hereto that Nielsen shall not be considered a party to this lawsuit, and that Nielsen shall have the right to enforce this Order before this Court at any time during or after this litigation.

14. The parties acknowledge that Nielsen retains all rights in and to the Nielsen Data except as specifically waived herein for purposes of this litigation.

Dated: March 17, 1995

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March 21, 1995

SO ORDERED: /s/ James R. Miller, Jr.
James R. Miller, Jr.
Special Master

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of DAVID BRUGGER, held at the offices of Willkie, Farr & Gallagher, 1155 21st Street, N.W., Washington, D.C. 20036, commencing at 9:10 A.M., Friday, April 7, 1995, before AMY E. SIKORA.

* * * *

[8] Q: * * * Mr. Brugger, I'm going to assume, unless you specifically tell me otherwise in the context of one of your answers, that the answers to my questions that you're giving me are both on your own behalf personally and also on behalf of the Association. Do you understand that?

A: Yes.

Q: Feel free if you're testifying as to only one or the other to tell me that. But if you don't, I'm going to assume it's both.

A: Okay.

[9] Q: And just so that I'm clear, you are the president of the Association of America's Public Television Stations?

A: Yes.

* * * *

[167] Q: * * * Have any public television stations gone out of business since 1985?

A: I don't recall any that have gone dark. They're not businesses so I can't use the term "out of business," because that presumes a commercial aspect that isn't there.

Q: Well, I can give you this document, if you want me to. I'm just going to read you a sentence from an APTS fact sheet that says, "it should not be necessary

to put large numbers of irreplacable public TV stations out of business in order to demonstrate the need for must-carry."

Using that definition of out of business, your own organization's own definition of out of business—

MR. LYNCH: What was the date of it?

MR. BOGART: April 1988. Here, I'll show you the document.

Q: I'm showing you a document, production No. PBS 007926 to 27 and the part that I'm referring to is just about at the end of the [168] document on the second page just above the heading of Future of Must-Carry, the last sentence. Do you see that sentence, sir? In the context that out of business is being used in that fact sheet, have any public stations gone out of business since 1985?

A: Not that I'm aware of.

* * * *

[199] Q: Leaving the January number aside, the number of stations went up between 1985 and 1992; is that right?

A: Yes.

Q: Just for clarity, that is the number of public broadcast stations?

A: The number of transmitters went up from 1985 to 1992. Probably the number of stations, although not as great.

Q: And in both cases you're using station to mean public broadcasting station?

A: Yes.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of JAMES P. MOONEY, JR., taken on behalf of the Defendants held at the offices of Jenner & Block, 601 Thirteenth Street, N.W., Washington, D.C., commencing at 9:30 a.m., Thursday April 13, 1995, before Deborah C. D. Shumaker, Notary Public.

* * * *

[181] Q: Do you know why this letter was cc'd to all the members of the NCTA Executive Committee?

A: As well as—

Q: As well as others.

A: As others. Probably—I do not know this for a fact, but I suspect it followed the FCC on Dick's letter to him on March 31st and April 4th or one of them.

Q: Was Mr. Leghorn in disagreement with the notion that this was an issue that should be kept away from Congress?

A: Mr. Leghorn was enamored of a specific proposal he had come up with, and I don't know that it was—that he was enamored of going to Congress, but whatever it was, it would have to go to Congress. It could not have been done by the FCC. That is my recollection of it which is very hazy, and offhand I couldn't tell you what his proposal was.

Q: Was Mr. Leghorn's notion the idea of essentially incorporating an A/B switch into the manufacture of TVs themselves?

A: It might have been. He at one time was an advocate for that position. Although I [182] don't recall whether he recommended that as an exclusive solution to the problem.

Q: What was NCTA's view, what was your view of that?

A: My view of that was that if the government had done that in the late '50s, early '60s, he wouldn't have any of this problem, that he had dual ports going into TV sets that the broadcasters would have been deprived of the one essential element of their argument that was technology-based, and that is that because almost all television sets are manufactured with but one entry port, the attachment of cable to the television set has the simultaneous effects of disabling the ability of the set to receive signals off air except through the employment of an A/B switch which would allow them to go back and forth, the A/B switch in effect making up for the deficiency of entry ports.

Q: In 1986 that hadn't happened, though right? That was water under the bridge?

A: Not only had it happened, but you had established practices of industries and assumptions of consumers well embedded in each group's [183] consciousness, and because people hate to change their habits and because you have got about a hundred million TV sets out there now which tend to last an average of 14 or 15 years apiece, you don't merely come on with an A/B switch solution all of a sudden merely to come up with a manufacturing solution. It isn't necessarily going to solve your problem.

Q: Is this a 14-year solution?

A: It would have been a good original solution. Once you failed to adopt it, it becomes somewhat difficult to go back. Although you can also make an argument for incremental solutions, too.

Q: But in any event, I gather your point is that is the kind of solution that could only become effective over a period of 10 years or more?

A: It could only become completely effective if you assumed the validity of the statistical evidence over a period of 14 or 15 years. That doesn't impress the FCC too much. They adopted a rule that relied on A/B switches.

Q: Those were external A/B switches, correct?

[184] A: To solve the problem, that's correct.

Q: NCTA never urged the Congress to adopt a rule that would have required TVs to be manufactured to change the internal dynamics of the TV in the way Mr. Leghorn was suggesting?

A: I don't recall that we did in large part because harking back to what you were inquiring about prior to lunch as to whether we would provide a transmission function of ideas and evidence and so forth, while I would not characterize this idea as harebrained, that was the kind of thing that I would have said, look, I have got too much to do here; if you want to do it, write a letter and do it yourself.

* * * *

IN THE UNITED STATES DISTRICT COURT
DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of BRENDAN ROY CLOUSTON, held at the offices of Tele-Communications, Inc., 5619 DTC Parkway, 11th Floor, Englewood, Colorado, commencing at 9:25 A.M., Friday, April 14, 1995, before LAURIE ORTMEIER, RMR, CRR.

* * * *

[38] Q: When you say that you expect this to happen next year, do you know—do you have a more specific target date?

A: The best information I have at the moment is that sometime between December of '95 and February of '96, we should finally know that the technology works in a way that has involved actual testing.

And to get volume delivery of decompression devices through their manufacturing process, ramp-up tells me that sometime between March and May of '96, I should be able to start to deploy digital converters.

MR. TYLER: The manufacturer ramp-up?

THE DEPONENT: Ramp-up.

MR. TYLER: Could you spell that.

MR. ISSENBERG: What do you mean by that?

THE DEPONENT: R-a-m-p . . .

All I meant was the ability—it's one thing to produce a thousand boxes to go out and test and make sure that the process works. It's another to really deploy deconverters.

* * * *

[63] Q: With regard to any of the 500 to 1,000 instances in which cable programming networks were dropped, do you know whether any of those networks have been reinstated to carriage?

[64] A: I know that I've been working like crazy to get product that people want back on. And, yes, we have been working to get signals back on that have been deleted.

We do that as rebuilds are completed in a given market, if we create channel capacity. From time to time, you know, certain programmers go out of business and you might free up a channel and you try to re-launch something.

Clearly, the going-forward rules—one of the key criteria of what we launched was what had been taken off, that people had let us know, in no uncertain terms, they wanted back on.

So, yes, we have worked very hard to get the signals back on. I'm especially aware of C-SPAN. And we had an awful lot of launches, in the going-forward rules, getting C-SPAN back on.

* * * *

IN THE UNITED STATES DICTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of JOHN HUDDY, held at the offices of Jenner & Block, 601 Thirteenth Street, N.W., Washington, D.C., commencing at 9:48 a.m., Friday, April 14, 1995, before Josett F. Hall, Registered Professional Reporter and Notary Public.

* * * *

[105] When this statement TWJ 2 says "solid ratings," those are—what were you referring to? What measures were you referring to?

A: For example, The Voyager did a 4 rating and a 6 or 7 share in the market. And its impresion—its demos are even better than that. We can take that to an agency and sell it.

Star Trek Deep Space 9 I believe on Wednesday night, as you demonstrated earlier, you look at that and there's nothing. Now we have something. We have demos. We have maybe it's a 2 rating and a 3 share in February.

And February is a transitional book because we still don't have all of our cable and the cable systems did not comply with Syndex and [106] network non-dupe and now have agreed to do so.

So February is a transitional book, but it's the beginning and we're very excited about that.

* * * *

[214] Q: In figuring out what you're going to charge for national, what your national spot rate is going to be, is that significantly different than figuring out the local spot rate?

A: Well, in theory it shouldn't be that different, but some national advertisers through their buying services operate with different formulas, cost per points, cost per thousand, than others and so there tends to be a range, as there is in local.

But there is a relationship. If news is selling for $175 locally, it isn't going to sell for $300 nationally, I mean, it might sell a little more; it might sell a little less. Often, however, national sells for a little bit more.

And that of course is driven by ratings.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of JACK N. GOODMAN, taken on behalf of the Plaintiff held at the offices of Willkie, Farr & Gallagher, Three Lafayette Centre, 1155 21st Street, N.W., Washington, D.C., commencing at 9:12 a.m., Monday, April 17, 1995, before Deborah C. D. Shumaker, Notary Public.

* * * *

[4] Q: What is your position at the National Association of Broadcasters?

A: I'm vice-president/policy counsel.

Q: What sort of responsibilities does that job entail?

A: I am in charge of the legal department of the National Association of Broadcasters.

* * * *

[6] Q: Is it your understanding that you are here today as the designated representative of the National Association of Broadcasters to provide testimony in this litigation?

A: Yes.

* * * *

[94] Q: Well, let's just take that example. Do you know whether any of the increase in stations—can you point to any particular station that received its construction permit in 1984 and built the station, say, in 1988? Are you aware of any stations?

A: No. I can't point to a specific station.

Q: If an investor had obtained the rights for the construction permit for a station in 1984 and had subsequently determined as a result of economic factors or changes in regulatory rules that it was no longer a prudent

business decision to build and operate that station, wouldn't that person have not constructed the station and not operated the television station?

A: Some might not have, that's true, and some didn't.

Q: It would appear that many did; is that right, based on the growth and aggregate number of stations?

A: It appears in a number of stations that a number of stations were constructed, yes.

[95] Q: If the number of stations—is it your testimony that the number of stations has no bearing on the economic health of an industry?

A: I believe I said it did not have a necessary bearing, that there was no necessary relationship between the two factors you specified.

Q: Does it have any relevance at all?

A: By itself, I don't think it gives you much information, no.

Q: One of the basic principles—are you familiar with basic principles of economic market entry and those types of theories?

A: Yes.

Q: Does a healthy industry normally experience net entry or net exit if it is a profitable industry?

A: I don't know if I can answer that question. That requires a lot more economic knowledge than I have, but I think what you are asking for is that over time an industry that is healthy overall may experience—if you seek growth, there may be a perception that the industry is healthy, yes.

Q: Is the number of television stations, [96] licensees, is that indicative of growth in this industry?

A: If there were an increased number of net television licensees during this period, 1984 to 1988, yes.

Q: Do you accept that, accept that that is one measure of growth of this industry?

A: It is a measure of growth of the number of stations, yes.

Q: Is it a measure of growth in the industry itself?

A: I don't know what you mean by growth.

Q: Is it a measure of economic growth of the industry if there are more stations operating? Is that consistent or inconsistent with a profitable or not profitable industry?

A: It has no necessary bearing at all. It is neither consistent nor inconsistent based on just those facts. These stations may enter and they may all lose money.

Q: If they are all losing money, would they not exit over time as principles of economics dictate?

A: Over time it would—over time of a [97] consistent period of time, if they are not making money and see no prospect for making money, yes, they will.

Q: Does any of the information that we have looked at indicate that there was net exit over time between 1984 and 1992 or even to the present with respect to television station licensees?

MR. ENNIS: I object. If you break the question down '84 until the enactment of "must-carry" and hereafter, I have no problem, but I think it is too confusing.

Q: Let's take 1985 to 1992.

A: I don't know the precise answer to that, but based on this, through '88 there was a net increase of the number of stations.

* * * *

[129] Q: I have just a couple last questions. On page 58 there is a statement in the second paragraph that talks about an erosion of broadcast television audiences. It says, "Editorial focus on the gains made by cable (which are salutary) and the consequent erosion of broadcast television audiences have cast a pall of negative comment across the TV medium. It suggests that the medium is on the decline", and there are three ellipses, and it says "which it is not".

Do you agree with that statement? And when I say "you", I mean does the NAB take issue with that statement which was prepared on its behalf?

A: As of 1989 the TV industry as a whole looking at gross numbers was not in an economic decline.

Q: Down to the sixth bullet point on that page where it says "Concern with the perceived [130] weakness, or decline, of broadcast television has obscured the fact that broadcast television is still the dominant form of TV", and there are three ellipses, "by a significant margin".

Again, is it your position, the NAB's position that this statement prepared on their behalf was an accurate one at the time?

A: Yes. Broadcast television as a whole. This does not mean that any particular broadcast station was in that position.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of M. PETER DOWNEY, taken on behalf of the Plaintiffs held at the offices of Willkie, Farr & Gallagher, Three Lafayette Centre, 1155 21st Street, N.W., Washington, D.C., commencing at 9:03 a.m., Tuesday, April 18, 1995, before Kathleen P. Thompson, Notary Public.

* * * *

[160] Q: Even a couple of years before the Act was passed, in other words, 1990 and 1991, cable carriage of public television stations was generally very strong; is that fair?

A: Generally very strong.

Q: Really, the issue for public television from 1990 through the passage of the Act was not so much acquiring carriage where it didn't exist, but was [161] getting a guarantee of carriage; is that fair?

MS. CORWIN: Object to the form.

A: Public televison believes that a must-carry provision, a regulation requiring carriage is approprate, and that is our contention, yes.

Q: And you believe that, though, because you want safety from it, as opposed to because that will cause a fundamental change in the cable carriage for public television, true?

MS. CORWIN: Object to the form.

A: Our objective is certainly to maintain the carriage that existed prior to '92, as well as whatever carriage was

aggregated because of the '92 Act. But in the main it's to assure the continued carriage of public television stations.

Q: As opposed to the new carriage public television stations—strike that.

I'm basically comparing your situation to the situation of the marginal commercial independent broadcaster. Do you agree that you and the marginal commercial independent broadcaster had a different set of goals—

MS. CORWIN: Object to the form.

Q: —from the passage of the 1992 Act?

[162] MS. CORWIN: Object to the form.

A: And I don't feel that I'm particularly conversant with the marginal commercial operators' interest. Our interest is certainly maintenance of existing carriage. And, as you say, a guarantee, assurance that public television will be carried by cable stations. It's not, its principal objective is not to achieve great increases of cable carriage because there aren't great increases to be achieved.

Q: Based on your knowledge of the cable industry's position prior to the passage of the Act, was there ever an issue between public television and the cable industry with whether at least one public television station was going to be carried on any given cable system?

A: I can't say there was much of any issue about one.

Q: The issue really was multiple public stations on the same system, wasn't it?

A: Yes. And I think, you know, a great deal of misunderstanding about the difference between two PTV stations are not like two NBC stations.

Q: And even given the multiple station issue, a substantial number of even the multiple stations in any [163] given market were being carried without the Act, true?

A: I think that's correct. I think there may be some exceptions, but generally I would agree with that.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of M. PETER DOWNEY, held at the offices of Willkie, Farr & Gallagher, 1155 21st Street, N.W., Washington, D.C., commencing at 9:13 a.m., Thursday, May 18, 1995, before Doreen M. Dotzler, Notary Public.

* * * *

[4] Q: And what is your current employment?

A: I'm employed by Public Broadcasting Service.

Q: You've rendered an expert report in this case, correct?

A: That's correct.

* * * *

[131] Q: What is the highest point that public funding has ever been for public broadcasting in the history of public broadcasting?

A: You mean—

Q: The higher percentage of operating [132] revenues, what is the highest percent which has been from public sources?

* * * *

A: If you mean by public funding, funding from tax based sources—

Q: Yes.

A: —state and federal and local—

Q: Yes.

A: —it is pretty consistently around the 50 percent level.

Q: So it is not outrageous for me to hypothesize by the goodwill of the people that is doubled to a hundred percent. If that happened, couldn't by the increased good-

will of the people and the legislatures of this land, couldn't they ear mark to compensate for the effect of non-carriage?

MS. CORWIN: Object to the form.

THE WITNESS: The government could do [133] that.

Q: And that could compensate for the effects of non-carriage?

MS. CORWIN: Object to the form.

THE WITNESS: In order to answer that I have to know what the damage is. In other words, what am I compensating for. Is it a dollar or a trillion dollars. Again, it is hard for me to say yes absolutely because I don't know what the consequences are.

BY MR. HUFFMAN:

Q: If the government intended to compensate, could it?

MS. CORWIN: Object to the form.

THE WITNESS: Yes. Yes, the government could.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEPOSITION OF JOHN C. SIEGEL

TUESDAY, APRIL 18, 1995

[2] Restricted 30(b)(6) deposition of KBHK Television through JOHN C. SIEGEL, and JOHN C. SIEGEL, individually, taken on behalf of Plaintiff Time Warner Entertainment Company, LP, at 555 California Street, Conference Room 19B, San Francisco, California, commencing at 9:35 a.m., Tuesday, April 18, 1995, before Frances Ann Weinrob, C.S.R. 4029 and Leland Batara C.S.R. 3759.

* * * *

[135] Q: You would then be, in that situation, compensating for advertising time and [136] audiences, sales and audience with that independent?

[136] audiences, sales and audience with that independent?

A: We didn't know our value of sales outside of our DMA, with the exception of the corporate purchases which may be the corporate buys. But, generally speaking, other than the corporate buys, the spot sales based on demographic rating points, the demographic rating points are based solely on the DMA. The corporate buys are people, and they're based on the total survey area, which may include outside the DMA.

Q: Could you explain? Corporate buy, what are those?

A: Proctor & Gamble makes a deal to buy X amount of time from you, and they'll tell you which products they're going to put in. And they come in relatively lower rates because they're buying a lot of bulk time period.

And so there is value to being outside your DMA if it's within your total survey area, but it's not as significant, significant amount.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of JAMES J. POPHAM, taken on behalf of the Plaintiff, held at the offices of Willkie, Farr & Gallagher, 1155 21st Street, Washington, D.C., commencing at 9:45 a.m., Thursday April 20, 1995, before Deborah C. D. Shumaker, Notary Public.

* * * *

[3] Q: Mr. [Popham], you are here today for a deposition as the designated 30(b)(6) witness on behalf of the association for Independent Television Stations; is that correct?

A: Yes, it is.

Q: You understand that your answers here today will be on behalf of the Independent Television Stations?

A: That's correct.

* * * *

[84] Q: Are you aware of any years in which the number of operating television stations has declined in this country?

A: I'm not aware of any years. We do know that in the early—I am sorry—'89, '91 period that there were a number of permitees of stations which were never built, and I assume to confirm that there were permits with actually a number of channels which were available for use, that there was less utilization of available channels.

* * * *

[100] Q: What are the factors that you think account for the increase in the number of UHF—I guess if I just say independents, that would probably be better—of independents in the late '80s?

A: I think in the late '80s there was a maturation of the industry that had begun probably in the early '80s, and the reason I say that is the time for applying for a station and going through all the FCC procedures, which may have involved a comparative hearing which literally would have taken years to getting the station built and on the air, the stations that were going on the air in the late '80s would have been born or conceived, so to speak, probably in the early '80s.

What was occurring in public television was really an access to quality programming which had not existed before, and that began in 19—in the mid-'70s, and it took place because in the early '70s, 1970, '71, '72, the Commission, FCC, adopted a number of rules

* * * *

[255] Q: Of course in '90, '91 there was a recession, right? We talked about that this morning?

[256] A: The people made the point to make the decision to apply to the stations three, four, five years before that so what was happening, in '91 an end result was in large part determined by what was happening in 1987, so when people started to apply for the stations, that is why you see a trailing fall-off even though the rules went down initially in '86. You had so many applications in the pipeline they were still coming out through '88 with substantial numbers, and then you start to see the decline.

Q: If someone files an application for a station in 1986, how long is it before that person receives word as to whether or not the application has been granted?

A: You have to understand that in 1986 virtually every application that was filed was challenged by someone else. There were multiple applicants. They had to

go through hearings which in the best of circumstances lasted two to three to four years, five years even before you got from the date you filed the application until you got a final decision through several numbers of appeals at the FCC, and that assumes you go to the Court of

* * * *

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXPERT REPORT OF STANLEY M. BESEN ON BEHALF OF PLAINTIFFS TURNER BROADCASTING SYSTEM, INC., ET AL.

* * * *

Table 17

Number of Broadcast Television Stations, 1940-1994 [1, 2, 3]

	VHF					UHF					Total VHF and UHF				
	Commercial			Non-Commercial [4]	Total [7]	Commercial			Non-Commercial [4]	Total [9]	Commercial			Non-Commercial [4]	Total [11]
Year	Network	Indep [4]	Total [6]			Network [5]	Indep [4]	Total [8]			Network [5]	Indep [4]	Total [10]		
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
1976	468	42	510	104	614	119	75	194	157	351	587	117	704	261	965
1977	470	42	512	106	618	120	79	199	162	361	590	121	711	368	979
1978	470	43	513	110	623	122	84	206	165	371	592	127	719	275	994
1979	471	43	514	111	625	124	94	218	167	385	595	137	732	278	1010
1980	472	43	515	115	630	129	105	234	172	406	601	148	749	287	1036
1981	472	45	517	115	632	131	132	263	176	439	603	177	780	291	1071
1982	473	47	520	117	637	136	163	299	179	478	609	210	819	296	1115
1983	473	51	524	120	644	142	185	327	184	511	615	236	851	304	1155
1984	476	53	529	121	650	144	211	355	194	549	620	264	884	315	1199
1885	476	55	531	121	652	150	246	396	198	594	626	301	927	319	1246
1986	477	56	533	122	655	151	289	440	207	647	628	345	973	329	1302
1987	479	56	535	122	657	157	317	474	217	691	636	373	1009	339	1348
1988	481	60	541	124	665	159	344	503	223	726	640	404	1044	347	1391
1989	481	61	542	125	667	163	367	530	230	760	644	428	1072	355	1427
1990	482	63	545	125	670	165	379	544	234	778	647	442	1089	359	1448
1991	483	65	548	125	673	168	393	561	237	798	651	458	1109	362	1471
1992	483	66	549	126	675	169	409	578	240	818	652	475	1127	366	1493
1993	484	66	550	126	676	169	417	586	240	826	653	483	1136	366	1502
1994	484	67	551	126	677	169	436	605	240	845	653	503	1156	366	1522

Notes:

[1] The *Factbook* lists the current station affiliation and the year of sign on for all stations in operation as of 1994. Therefore the figures do not reflect changes in station affiliation or stations that have gone off the air.

[2] Includes stations in Guam, Puerto Rico and the Virgin Islands.

[3] Includes affiliates of ABC, CBS, NBC, and joint network/Fox stations.

[4] Includes independents and Fox stations.

[5] Columns [3] + [1] + [2].

[6] Includes public and educational stations.

[7] Column [5] + [9] + [4].

[8] Column [6] + [4] + [7].

[9] Column [10] + [8] + [9].

[10] Column [13] + [11] + [12].

[11] Column [15] + [13] + [14].

Sources:

Warren Publishing, Inc., Washington, D.C. (television station data)
Television & Cable Factbook, Stations Volume No. 63, Warren Publishing, Inc., Washington, D.C., 1995, pp. A16-A1346. [date of operation data]

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

REPORT OF ELDON J. HAAKINSON

* * * *

5. I have published, as primary or secondary author, numerous reports on telecommunication propagation issues, including reports related to signal propagation standards. A list of my publications is attached to this report as Exhibit A.

* * * *

[EXHIBIT A]

Eldon J. Haakinson Publications List

Primary Author January 1995

1. "Spectrum Sharing and Compatibility of Systems in the 1535-1660 MHz Band, System Description for the RCA SECANT Collison Avoidance System", December 1972.
2. "Catalog of Spectrum Engineering Capabilities, Issue #1", January 12, 1973 (with T.A. Harr).
3. "Spectrum Sharing and Compatibility of Systems in the 1535-1660 MHz Band, System Description for the Honeywell AVOIDS Collision Avoidance System", February 1973.
4. "Spectrum Sharing and Compatibility of Systems in the 1535-1660 MHz Band, System Description for the McDonnell Douglas Time Frequency Collision Avoidance System", April 1973.
5. "Electromagnetic Compatibility of Radar Altimeters with the RCA SECANT Collision Avoidance System", April 1973.
6. "An Overview-Spectrum Resource Assessment for the 1535-1660 MHz Band, Report on Phase II", May 14, 1973.
7. "Spectrum Sharing and Compatibility of Systems in the 1535-1660 MHz Band, System Description for the MARSAT System", June 1973 (with T.A. Harr).
8. "Spectrum Resource Assessment for the 1535-1660 MHz Band, Phase II-Analysis", OT TM 74-165, March 1974 (with H.G. Kimball).
9. "Electromagnetic Compatibility of Simulated CATV Signals and Aircraft Navigation Receivers", OR 74-39, June 1974 (with T.A. Harr and S. Murahata).

10. "Spectrum Resource Assessment for the 1535-1660 MHz Band, Addendum, OT TM 74-165-2, October 1974.

11. "An Automatied Technique for Calculating Interference from Airborne Transmitters to Terrestrial Receivers", OTR 77-110, February 1977 (with J.K. Wheeler). (NTIS Access. No. PB 264519/AS)

12. "Power and Beam pointing Restrictions for Geostationary Orbit Avoidance: Program ORBITCHECK User's Manual", OTR 77-119 (NTIS Access. No. 268027), April 1977 (with D.E. Skinner).

13. "Automated Computing and Plotting of Geostationary Satellite Earth Footprints: Program FOORPTINTS User's Manual", OTR 77-120, (NTIS Access. No. PB 267953) April 1977 (with D.E. Skinner, K.P. Spies, and G.J. Bridgewater).

14. "Extended Area Test System in the 136-148 MHz Band—An EMC Assessment", OTR 77-122 (NTIS Access. No. PB 269226), May 1977 (with A.C. Stewart, J.E. Adams, and L.E. Vogler).

15. "Spread Spectrum: An Annotated Bibliography", NTIA Special Report NTIA-SP78-1 (NTIS Access. No. PB 283964), May 1978.

16. "Land Mobile Radio System Performance Model for VHF and Higher Frequencies Over Irregular Terrain", 28th IEEE Vehicular Technology Conference, 78CH1297-1 VT Conference Record, Denver, CO. (with R.D. Jennings), (March 22-24, 1978: The Institute for Electrical and Electronics Engineers, Inc., NY, NY, pp. 512-517).

17. "Spectrum Efficiency for Multiple Independent Spread-Spectrum LMR Systems", NTIA Report 78-11, (with L.A. Berry) November 1978.

18. "Measurements of LF and MF Radio Propagation Over Irregular Inhomogeneous Terrain", NTIA Report 78-12 (with W.A. Kissick and G.H. Stonehocker), November 1978.

19. "Propagation Effects on an Intervisibility Measurement System Operating in the SHF Band", NTIA Report 80-35 (with E.J. Violette and G.A. Hufford), February 1980.

20. "Coverage and Interference for Second-Adjacent-Channel FM Broadcast Stations", published in IEEE Transactions of Broadcasting 1980 (with J.E. Adams).

21. "Proposed Techniques for Adding FM Broadcast Stations in a Major Market Part II", NTIA Report 80-44, July 1980.

22. "Proposed Techniques for Adding FM Broadcast Stations in a Major Market", NTIA Report 81-77 August 1980.

23. "ILS Localizer Receiver Performance in the Presence of Co-Channel Interference, DOT/FAA/RD 82-43, Final Report July 1982.

24. "Telecommunications Analysis Services, Reference Guide", 1983

25. "Meteor Burst Communications Model", NTIA Report 83-116, February 1983.

26. "Measurements and Predictions of HF Ground Wave Radio Propagation Over Irregular, Inhomogeneous Terrain", NTIA Report 84-151 (with J.E. Adams, J.C. Carroll, E.A. Costa, D.R. Ebaugh Jr., J.R. Godwin, D.H. Layton and D. Smith), July 1984.

27. "User's Guide for the HF Broadcast Antenna Design and Validation Summary Programs", NTIA Report 87-220, (with S.L. Rothschild and J.R. Godwin), July 1987.

28. "MF Broadcasting System Performance Model", NTIA Report 88-237, (with S. Rothschild and B. Bedford, August 1988.

29. "An Evaluation of the North American Advanced Train Control System", NTIA Report 94-312 (with W.R. Rust and M. Garrity), July 1994.

30. "A National Approach to Augmented Global Positioning System Service", NTIA Report 94-xxx, (with R.O. DeBolt, R. Dalke, G.A. Hufford, W.R. Rust, M.J. Terada), fall 1994.

Secondary Author

31. "Performance of Single and Multiple System AM Stereo Decoder Receivers", NTIA Report 87-223, (with J.E. Adams, V.M. O'Day, B.L. Bedford, and B. Riddle), August 1987.

32. "U.S. Department of Agriculture Forest Service Eastern Region Strategic Telecommunication Plan 1994-2003", NTIA Report 94-307, (with W.R. Rust) 1994.

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

EXPERT REPORT OF TOM MEEK

* * * *

For the purposes of this report all stations known to have gone dark for technical reasons such as transmitter or antenna damage were excluded from the general analysis presented as year-to-year totals of dark stations, although specific information concerning stations that were cited as having such damage may be included as a supplement to the general data presented if believed to be relevant for specific stations. Also excluded were stations known to have been ordered off the air by FCC action, although again relevant information concerning those stations may be presented on a supplemental basis. In one additional known instance a license was returned to the FCC as part of a VHF/UHF station upgrade, and that station is not counted in the reported dark totals. Stations licensed outside the continental U.S. are also excluded from the dark station numbers, and therefore it should be expected that total adds and dark stations represented here will therefore not always lend themselves to being summed to equal the quarterly or annual net station totals presented.

The data indicates generally that from 1985 through 1987 the numbers of new stations beginning operations continued to increase. The largest percentage of these stations were independents, many of whom would become affiliated with the new Fox network which began operations in 1986. Additional network-affiliated stations were still being added in small television markets during this time, as well as some educational stations, but the numbers of new network-affiliated stations was a small percentage of the total group. Some foreign language stations

and educational stations also signed on in this period. The numbers of stations going off-the air was generally limited in this period, with one dark station in 1985, two stations in 1986, and one station in 1987. New station commercial sign-ons were reported at 45 for 1985, 49 in 1986, and 40 for 1987. In 1988, however, the number of dark commercial stations increased to six while new commercial stations signing on totalled 39. In 1989, 34 new stations signed-on while seven commercial stations went dark.

The first quarter of 1990 saw the first reported drop in the number of commercial stations operating measured on a quarterly basis during the period studied (i.e., beginning in 1985). For the year, total commercial station sign-ons were only 18, while four additional stations went dark. In 1991, the number of new stations signing on increased to 20, while six additional commercial stations went dark. In 1992, 18 stations signed on, while four additional commercial stations went dark. In 1993, the number of commercial stations reported as dark fell to three stations, while new stations sign-ons fell again to 10. In 1994, the number of stations reported going dark was zero, while new station sign-ons were nine. (It should be noted that because of the lead time between issuance of a construction permit and commencement of station operations, the number of new sign-ons in a given year may reflect market conditions and events in earlier years). A complete list by quarter of total stations on-air from 1985-1994 is included as Exhibit N. (The data also includes totals for UHF and VHF total stations, construction permits and applications pending.) (See Attachment D for summary chart of commercial stations on air).

Analysis of the data provided generally indicates the number of new stations signing-on declined beginning in 1988, while the number of stations going dark began to escalate. As noted above, in early 1990, the number of stations going dark actually exceeded those signing on for the first time in many years, causing a net decrease in the number of commercial stations in operation. The year

1990 also saw the fewest number of net commercial station gains (6) recorded since 1978. Commercial station growth continued to be slower through the early 1990's, again falling to less than single digit (7) net growth in 1993.

Cable carriage or the lack thereof can be an important factor in determining a station's ability to remain on the air. Although it is not possible to say based on the available data that lack of cable carriage was the sole reason for a station's failure, one can reasonably infer that a lack of carriage or drops by significant market cable systems can be a major factor in a station's continuing viability. The stations below appeared to have significant cable problems prior to going dark.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of BERNADETTE MCGUIRE, PH.D., taken on behalf of the Plaintiffs held at the offices of Willkie, Farr & Gallagher, 1155 21st Street, N.W., Washington, D.C., commencing at 9:13 a.m. Friday,, April 21, 1995, before Kathleen P. Thompson, Notary Public.

* * * *

[4] Q: * * * [D]o you understand that you're here today as the corporate representative of America's Public Television Stations?

A: Yes.

Q: And you understand that the answers [5] that you give to my questions will bind APTS?

A: Okay.

* * * *

[87] Q: When you are arrived at APTS in 1987 did APTS already have collected a body of information about cable drops and shifts?

A: Yes, they had a list.

Q: And do you know how that list was generated?

A: I don't have direct knowledge because [88] I didn't get involved in it until really, I think, during the summer.

Q: The summer of '87?

A: '87. That, I think it was a list of contacts that APTS had received from stations that indicated that they had been dropped from a cable systems or were going to be dropped from a cable system.

Q: Had APTS verified those claims?

A: I don't think at that time they had.

Q: Did you consider that information to be accurate?

A: I believe it is accurate to the best of the reporting station manager's ability.

Q: Well, leaving whether it's the best of their ability aside or not, was it accurate?

A: I think as, we later found that some of the things were not accurate.

Q: And did you attempt to go back and verify the information that had been collected prior to your involvement in the summer of 1987?

A: Yeah. That summer of 1987 we, Clark Parramore was working with me, called the cable systems on the list and asked whether in fact the [89] station had been dropped or if it had been restored, and so he verified the information about whether it was dropped or shifted with the cable operator.

Q: How many instances of drops, actual drops did NAPTS know about prior to your involvement in the summer of 1987?

A: I do not know the exact number.

Q: Can you give me an approximation?

A: I would, really, I think, I think, and this is again, I think, like 175, 200.

Q: And that's actual drops, not threatened drops or repositions; is that right?

A: I'm not sure. The way they kept it at that time I think it was about 175 or 200.

Q: So that could have included repositions?

A: It probably did not.

Q: And after vertification how many of those drops did you discover were not accurate?

A: I don't remember the exact number, but there were quite a few that were not, or they had been put back on the cable systems since the time they were originally reported.

[90] Q: Well, how many of them hadn't been dropped at all?

A: I don't remember the exact count, but there were quite a few because then we did another list.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of JOSEPH L. STERN, taken on behalf of the Defendants held at the offices of the U.S. Department of Justice, Federal Programs Branch, 901 E Street, N.W., Washington, D.C., commencing at 9:35 a.m., Wednesday, May 3, 1995, before Deborah C. D. Shumaker, Notary Public.

* * * *

[39] Q: If it is an outdoor antenna would the viewer have to climb on the roof and tilt the antenna?

A: I don't propose anybody to climb on the roof unless they are well versed and have good rubber shoes and lots of insurance. I would suggest that the antenna installer does this work.

Now, there are also filter devices which take care of this, and many—in areas where tropospheric interference is serious, people have gone to the local TV installer and they have put in either antennas that buck out the signal or filters, and a wide variety of things have been done.

[80] Q: Is the information regarding what type of antenna to select available to the consumer?

A: Yes, it is available to the consumer in a number of different forms.

Q: How?

A: Consumers Reports. I have forgotten the official name of the publishing company.

MR. HUFFMAN: Consumers Union.

A: Consumers Union. Thank you. Consumers Union for many years published an analysis of antennas. That's one source.

Q: Would the Consumers Union study—did you call it a study?

A: No. I didn't call it a study.

Q: I am sorry. What did you call it?

A: They published reports on different [81] types of antennas.

Q: Would the reports be detailed as to whether the consumer lived in a mountainous region, in a hilly region, in the city, in a rural area, in plains?

A: Well, those reports that were in the publications of Consumers Union in many cases indicated that if you were living X miles away you might consider using this super duper Double Star Blue Flash, whatever it was called, as opposed to if you were living next door to the transmitter you might consider using this. I doubt if they talked about the foreground in any way because it really is not germane at all. It's the real world where unless you are the first person in the area to ever get television, there is a little bit of experience available. I happened to have been one of the first people to get television in one location, and I had to do it cut-and-dry to try to find out what to do, but after that the neighbors asked me and vice versa. It's just common, so that one source of information is Consumers Union.

Another source of information are the popular Handyman, Popular Science, Popular [82] Mechanics. A third source is the people who sell antennas. In a modern Radio Shack catalog there is a listing of their analysis of what type of antenna is good for urban, suburban, fringe, fringe being beyond the Grade B, far fringe being way beyond the Grade B, and they list the type of antennas they suggest be used, so catalogs are another thing.

The TV service companies that sell television and install television antennas have experienced installers, and if you want to buy an antenna and not have it installed, depending on where you live, it is very common for those stores to stock antennas of the type that are most generally

usable in that area because their goal is to sell. Their goal is not just to stock antennas to show. They want to buy only devices which people will buy, and if they don't do a good job, they are not going to come back to buy anything anymore, so that type of information is available.

Q: On page 1), the very bottom you discuss master antennas, and you state these are used in apartment buildings and condominiums.

How much do those cost?

A: To whom?

[83] Q: Can you give me a range of costs?

A: To whom? I mean, are we talking about the cost to the viewer?

Q: No. If one were to go to a store and purchase a master antenna.

A: No, you don't go to the store to purchase a master antenna any more than you go to the store to purchase a sewer system for a condominium. A master—perhaps I need to define what a master antenna is.

Q: Okay.

A: A master antenna is a single or a collection of multiple antennas installed in the top of an apartment building or adjacent to a condominium with combiners, amplifiers, processors and distribution systems so that it can be carried to each individual apartment or dwelling in the area. That's what a master antenna system is.

Q: Can you put a price tag or a range of prices on how much a master antenna would cost?

A: To service how many people is the question?

Q: Fifty.

A: If you wanted a master antenna system, [84] where would you put this? Give me an example of where you want to put it.

Q: At the top of an apartment building in New York City——

A: Okay.

Q: —that houses fifty tenants,—

A: Okay.

Q: —fifty apartments.

A: A master antenna system, fifty apartments, that would be a building of only six or seven stories, so about $12,000, wired, installed, union labor. I mean, I don't know how far you want to go, or do you want parts and pieces? It is totally different. Parts and pieces is much cheaper.

Q: The building doesn't have a master antenna—actually, strike that.

What percentage of buildings use master antennas?

A: I don't think it has ever been quantified. However, there is an interesting situation that it is my recollection that in New York City, including all the boroughs, that you are entitled to put up an antenna on the roof of the [85] building if there is no master antenna, and if any of you have ever driven through Queens Boulevard on the way to the airport, at the top of those apartment houses you will see porcupines for the buildings that have no master antenna, and you will see a single structure with maybe three or four antennas on one mast for those that haven't a master. There are still many, many buildings that do not have master antennas but they have multiple antennas and the transmission line is running down the side of the building into the window of the apartment. As far as the numbers that have master antennas, I don't know if there is a quantification.

Q: If the building didn't have a master antenna, the consumer would have to purchase an outdoor antenna?

A: Or use an indoor antenna.

Q: And have it installed on the roof?

A: Or have an installer install it.

* * * *

[115] Q: The first paragraph on page 13, the last sentence that begins "as a consequence", it states, "As a consequence", of these improvements, "modern television receiving antennas feeding signals to modern television receivers permit most television households within City Grade and Grade A contours to view high quality off-the-

air signals with indoor antennas and television households with in Grade B contours to use modest size outdoor antennas mounted on a rooftop or in an attic."

Can you explain what you mean by that statement.

A: To paraphrase the statement, it is in my experience and in my review of the extensive field survey work done by the FCC in 1962 as well as discussions with my peers in the consulting field and with the directors of engineering of a number of television stations that within the confines of the Grade A contour, which includes City Grade and higher, indoor antennas are quite effective, effective in that the viewer is [116] satisfied with the signal which is what the whole business is about.

Secondarily, within the area from the TV transmitter out to the limit of the Grade B contour, in my experience and consulting with the same group of people as well as reviewing the FCC measurements made in 1962 and followed up with field intensity measurements made in 1963 that modest size outdoor antennas on the rooftop served to provide an acceptable picture to the viewer.

Q: Is there a difference in your mind to the term "acceptable" in the phrase "high quality" that you used in this paragraph?

A: No. I am relating this to the viewer satisfaction, so, therefore, I am presumptuous enough to suggest that the viewer is accepting the high quality picture or as high as he or she can get at that location.

Q: Is that statement true in a multipath environment, the statement that I read earlier?

A: The statement is true in a multipath environment unless the multipath is so onerous that you can't view the picture. There is no such thing as a multipath environment. Every individual [117] receiving at the location is different. One might say that New York City is a multipath jungle while in fact the FCC studies done within 25 miles of the Empire State Building found that they were

able to get clear signals in well over 80 percent of the locations with indoor antennas.

Q: On page 13 you state, next paragraph, improvements in indoor antennas appears to have influenced the sale of indoor antennas.

What basis do you have for saying that?

A: The fact that three and a half million units were sold in 1993 sort of triggers me to suggest that there has been a great number of indoor antennas sold, and the fact that those antennas have been designed by a number of different people with sort of unusual and surprising additions to them made them saleable, and more and more people bought them. The differences are that in sort of the beginning they were rabbit ears, and that is the worst or simplest adaptation because a rabbit ear antenna is a bastardization of a standard dipole. No matter what you do with it, it will have less than a [118] standard dipole, so it is convenient, but as far as gain, it is a loser, but it's cheap, and so designers came along and made other structures and provided tuning circuits with them so that you could maximize the energy at particular channels and put them on flexible channels so that they could be rotated and added broad band characteristics in some cases and in some cases added amplifiers.

Q: Does this 3,500,000 figure reflect such domestic sales?

A: The only domestic sales that I know of, yeah.

Q: Do you know whether any of these indoor antennas sold in 1993 were exported?

A: If they were exported, they were not designated for export. I mean, there are places in Miami where everything goes to Latin America, but these are not export figures. These are domestic figures.

Q: Do you know how many televisions were sold in 1993?

A: No, I don't, but information is readily available.

* * * *

[155] Q: Will there be interference between the antennas?

A: If propertly installed, there should not be.

Q: If they are not properly installed, there may be?

A: If something is not doesn't properly, it won't work properly. I can't categorize it.

Q: Getting back to Model 15-623, have you tested that model?

A: I have tested that model. Excuse me. I have used that model. Testing is an open question.

Q: In your own home, you mean?

A: No. In many locations. In New York, Los Angeles, Milwaukee and Chicago.

Q: What was the purpose of using it?

A: As in my position as vice-president of engineering of the Stations Division I was [156] concerned with transmission and reception, and in the case of Milwaukee, we found that we started a new station there, Channel WXIX, Channel 19, and we found that there were very few people watching it. It turned out that they didn't have antennas. We would come on the air much too soon, and so the first thing I did is I took what I thought was the best indoor antenna around, and we went to places where people complained about the reception since they were trying to get the reception on their VHF antennas, and they were watching programs, but it wasn't very good, and would tweak these antennas around and found that they worked very well in many of the households.

We subsequently improved the coverage by a thousand percent by buying a carload quantity of Channel 19, cut the frequency Yagi antennas and were giving them away. Since they cost us two and a half thousand dollars apiece, it wasn't a bad deal, and it worked beautifully.

Similar tests were done in New York, and the reason I did them in New York was that I was in charge of Channel 2's facility on the Empire State Building, and we were requested by the [157] city-owned public broadcast station, Channel 31, to make space available so they could put their antenna in the same space, so we worked with them to develop the coverage, and as part of the testing

we used that double bow-tie antenna. It was the same antenna that was used by the FCC in their 1962 test of 700-some-odd locations.

Q: You mentioned that you tested it—I mean you used it, is it, in four locations?

A: Yes.

Q: What were the locations again?

A: Milwaukie, New York, Chicago and Los Angeles.

Q: Were there circumstances where you found that the antenna didn't work well?

A: Oh, yes.

Q: What situations were those?

A: Again, where we were on the wrong side of a building blocked by another building.

Q: Any other situations?

A: I think the only situations where it didn't work was where there was no signal available. It wasn't a matter of whether we had that antenna or others. An antenna doesn't work if [158] there is nothing for it to pick up.

Q: Did you experience problems with ghosts with this antenna?

A: In installing an antenna, if you are not in a wide open space with a clear line of sight, there is also a possibility of some kind of multipath reflection or ghost. The placement of the antenna is chosen to minimize or to avoid that. We did in the course of testing these experience ghosting but not problems with ghosting. It was the normal thing as you align the antenna so that you are not receiving the ghost.

Q: Are there situations where it's impossible to eliminate ghosting?

A: There are situations where it is impossible to eliminate ghosting, and yes, there could be such situations.

Q: Are there any negative aspects to using this antenna?

A: It depends on the design tastes of the homeowner.

* * * *

[198] The question in 28, the question of guidance and recommendations about information, I think it is a bit exaggerated as somehow guidance is provided by antennas. There is a great deal of guidance provided by manufacturers in their manuals. There is a great deal of guidance in the stores that sell the antennas and the TV sets and the manufacturers as well. Quite often—I think I mentioned this earlier. They quite often will create a package for an area and they will have a site-specific antenna package which in many cases will include one, two or more antennas which can be positioned to pick up the three directions from which the TV signals are coming without using a motor, and quite often if it is in an area of low [199] signal area they will, the package will include separate down leads from each of the antennas and more often than not separate cable just for UHF so that you avoid the coupler loss and you use the twin-lead for UHF. You may have problems with local pickup on VHF. You can use coax for there, but this was done by the manufacturers and marketers. They are out there to sell antennas and installations, and they provide that information.

On page 14 on paragraph 31 my same comments in regard to the FCC assumption, because the FCC assumed a series of variable conditions such as 50/50 curves, that they were to cover various conditions, and, again, in the last sentence, the transformer, combiner and splitter losses, if any, given dB, it can be zero dB. That's fine, but there is not always that problem.

I am also disturbed by the sentence following the Table I which says "In fact, however, these receiving system gain assumptions do not hold in many households and many communities, and this leads to unacceptable reception." I would say that they hold in more households than not and they lead to acceptable reception. There is nothing here to [200] indicate any quantification of any kind that these do not hold in any statistically significant number of households. The last sentence on the page is like saying some

people don't like tomatoes. Receiving system gain may not be adequate, and if it isn't then you do something about it, and most people have, and I don't know what the point of—I mean, I don't agree with the statement as part of the reality unless it has a companion statement which says "and some may be adequate".

Page 15, Table 2 perhaps has some academic value that I don't understand, but if we were to tabulate all the worst configurations of everything we could buy, I doubt if we would suggest that people were buying the worse configurations of whatever it is. The object here which has been proven, is reception of televisions for the enjoyment of the viewer, and they are out there receiving television and enjoying it to whatever the degree they choose for themselves, and according to this chart, the best configured situations would do very well to provide a high quality signal whereas the worst configured situations would be troublesome depending on where [201] you are.

Again, there is nothing in the report that suggests that the Grade B contour is an area which includes all of the households from the transmitter location out to the line called the Grade B contour. The signal level is higher at all the points generally prior to reaching the contour, so that we can either assume that all of the comments here relate to people living on the contour and anyone within the contour is ignored or is accepted to have a much higher signal, so I take issue with Table 2, and I don't suggest that anyone would want to buy the worst configured, and I salute the agency for finding out which are the worst configured, and I think they should publish it if they won't get sued.

I also disagree with the statement that these are probably true representations for today as they were 10 to 15 years ago except that if you try hard, yes, you can find a very bad configuration, but if you try to find out, I suggest, I have no quantification, but I suggest that if you find out which are the antennas that are sold in an area

with the greatest volume, you [202] will find out that those are pretty much a good configuration.

In paragraph 34, the line starting with "because of component aging, corrosion, lightening damage or poor installation, the home owners' system gains would not normally approach the gains achieved by the best configuration", well. I take issue with that because if there is lightening damage, I don't think there is any antenna at all. I suggest that if there is a best configuration, I think that's fine. I think that any operating system, be it an antenna, dishwasher, clothes washer, there is component of aging and there is need for maintenance and there is need for something, but I can't agree with the statement that said it would not, normally system gains would not normally approach the gains achieved by the best configuration.

What is usually done in practical operating stations is that assumptions are added as to the loss or change in performance that will occur over time. Maybe a 5 percent change or something over a period of X years, but to make a statement that because of aging, yes, everything [203] ages, people and equipment, because of corrosion, there may or may not be corrosion depending on the antenna choice of anodizing or protective coating. Lightening damage I would leave out because when that strikes, it's all over. Poor installations, I think that would take, be taken care of pretty quickly if the installation was so bad that pictures weren't good there would be some complaint.

The NAB study that is referred to here, to my knowledge, is not cited, but I think it may be the ELRA study, and, to my knowledge, that didn't evaluate any antennas. It just asked the homeowners they interviewed as to the age of the antenna.

MR. ISSENBERG: What is the study you just mentioned?

A: E-L-R-A, an East Lansing Research Agency or something like that. They are in East Lansing, Michigan.

The suggestion is that in the second sentence following mention of the study that "In many cases, the gains of the

homeowners' antennas are expected to be worse than even the worst [204] configuration". There is nothing in the ELRA study that makes that suggestion, and there is nothing here which makes that suggestion, and it is just floating loose, and I disagree with it personally.

Page 16, I think the title of Table 4 is misleading since it says "Population Not Having Sufficient Receiving System Gain For Adequate Video Signals in the Two Service Areas", those areas being the Grade A and outside the Grade A. There is no showing of any kind that there is not adequate video signals. It may be an assumption on the part of the people who did the investigation that they weren't adequate, but there is no showing of any kind.

In addition to that, the study that is referred to here in the measured antennas, in the Chicago/Peoria study, even the authors of the study indicate there may be some bias in the study because they said they were allowed into homes where they think people had poor reception whereas people with good reception didn't want them to bother them, so I feel that on that basis alone it's an interesting exercise, but I don't believe it is a valid study.

[205] Secondarily, I don't believe any showing was made about adequate video signals. All that they measured was that the signal was les than the FCC assumptions for the allocation plan. By no means is that an inadequate signal.

Further, in paragraph 36, I don't think there was anything shown in the ITS measurements which imply that there is a large variation on the quality of installation since they admitted there was a bias possible and that people with poor installation would invite them in as opposed to people with good installation, so it seems improper as a conclusion to suggest that there is a large variation in the quality of installation since the variation should be tested over a uniform sample.

Page 17, figure 7, I know this is taken from the ITS report, but I suggest that the numbers would be considerably different and the plot would be considerably differ-

ent and the results to be plotted on Table 4 would be considerably different if the plots were separate based on Peoria and based on Chicago. There are human factors that have to be involved, and the [206] people in Peoria, in the Peoria area are much more interested in picking up UHF than the people in Chicago because Peoria doesn't have the same availability, and if you did only Peoria, the numbers would change. By the same token, if you take the VHF and you were to rearrange and separate those figures, those numbers would change.

At the same time, with the change in numbers and the change in percentages with homes of insufficient receiving gain, even those with change, the validity is still not there because of the potential bias admitted by the people who put forward and reported on the study.

In paragraph 38 I think it is not quite correct to imply that the home viewers are unable to have outside antennas because I consider a master antenna an outside antenna.

Paragraph 39 I think is very unfortunate because it appears to be based on the ITS report that has two measurements, two locations with two different antennas, and it is not quite logical or statistically or scientifically correct to say that of over a million households, we tested two and, therefore, we suggest that this is what's [207] going to happen to a million households, and the two were tested without quality indoor antennas.

In addition to that—

Q: Wait. Why do you say they weren't quality indoor antennas?

A: Because they are identical in the report.

Q: You are familiar with this report?

A: Yes, I have a copy of the report.

Q: I am sorry. Go ahead.

A: And in addition to that, they are not as good as the antennas that were tested by NTIA in another report on indoor antennas which is not related here at all.

Q: What report is that?

A: NTIA 79-28, and, further, they are not as good as the antennas used by the FCC in their 1962 test, so in short, what we are saying is that two poor quality antennas were used and extrapolated to suggest how some 2.4 million households will be affected. It just boggles my mind.

Q: NTIA study 79-28, what did that show?

A: That is a measurement analysis of [208] indoor antennas. It's one of a body of information on antennas and that if you associate that or relate it with the FCC work shows that there are some very good indoor antennas. In addition, the NTIA work shows the variation and cites documentation of measurements of propagation through buildings, and that's also very important because it is a signal that this at the antenna that's important, but by no stretch of the imagination do we have any foundation for making a 25 dB change in the coverage.

Paragraph 40, I think it should have indicated that some of the antenna system gains were lower than assumed by the FCC whereas the way it reads, it sounds as though they are all inadequate. It suggests here that the attributed, the lack of design, installation and service —I am sorry. They attribute the facts that is stated here as fact to a lack of information to he consumer, and I say to you that even in the catalogs, like a Winegard catalog, they will indicate that they have area-specific antennas, and the dealers in those areas have area-specific antenna combinations, and if you go to an area [209] where there is a TV over here and two TV's over here and another station over here, their normal package is to sell you a mast with three antennas on it. That's it. The information is there.

Accordingly, as I follow on paragraph 41, I disagree that there are inadequacies. If it is an inadequate signal, then the viewer who has the TV, off-air TV will not get adequate signal, and the same place, if they have cable

and A/B switch, it would be the same; if it is adequate, they will have the same.

I don't see any inadequacy. It says because of the inadequacies of receiving antenna installations. Nowhere has it been shown that receiving antenna installations are inadequate. What has been shown is that a group of potentially biased, 50 potentially biased households were measured and in general found to be lacking by standards established by that particular group for their purposes, but it doesn't translate into this statement.

Q: Just a minute.

MS. MOREAU: Can you read back his answer, please.

[210] (Record was read as requested.)

BY MS. MOREAU:

Q: So by that are you saying that it's the signal that is inadequate and not the receiving antenna installation that would affect a viewer's reception?

A: No. What I am saying is that the measurement that was taken at 50 potentially biased locations were found inadequate. If the entire universe that we are talking about in this case of Turner versus FCC is 50 homes, then all of this is germane, but if it has to do with more than these 50 homes, it is not germane at all to make the statement.

* * * *

[247] Q: To your knowledge, was any such study porformed by the authors of this study or the organization for which they worked?

A: To my knowledge, no such study was performed by the authors or by NTIA.

Q: If there was, you have never seen it?

A: If there was, I have not seen it.

Q: Turning to paragraph 38 on page 19,—

A: 38, yes.

Q: —you mentioned, I believe earlier you referred—

MR. ISSENBERG: I am sorry. Are you on his report?

MR. LOCKWOOD: I am sorry. I am back on Mr. Haakinson's report. Excuse me.

MR. ISSENBERG: Okay. Okay.

BY MR. LOCKWOOD:

Q: In giving an earlier answer on this you made some reference to master antennas. What, if any, relevance do master antennas have to the various bullet points under paragraph 38?

A: Well, the first one, the "installation [248] not allowed by the apartment owner", in almost every case that I have ever heard of or know of, the alternative is available through a master antenna, so, therefore, it seems specious to argue that that's the reason why they can't have an outside antenna when there is in fact one.

Q: You may have answered this already, and if so, I apologize. Are you aware of any significant number of cities that have ordinances barring outside antennas within their bounds?

A: No. I am not aware of any significant number; nor do I believe there is a significant number because if there was, there would be very little off-the-air television.

Q: With respect to the third bullet point, "installation not allowed by neighborhood or development covenants", do master antennas have any relationship to that topic?

A: Yes. In may cases where the development is a condominium or a so-called planned community, a master antenna is erected either on one structure of the complex or on a tower, an outside area where the aesthetics will not be disturbed and service is provided by a master [249] antenna distribution system.

Q: What about the fourth bullet point?

A: If there is blockage and there is no reflected signal available from another building or or another mountain, then there's no point in putting up an antenna.

Q: And that would be the same whether or not the television viewer was trying to obtain that station through an A/B switch off a cable or didn't have cable at all?

A: Right. It would be exactly the same.

Q: The fifth bullet point makes reference to something called difficult transmisison line runs. Do you know what the refers to as a reason for not being able to have an outside antenna?

A: Well, it is hard for me to consider that there is not some way to provide a transmission line run. The word "difficult" probably suggests that it is not a case where you can just drop the cable and pull it through the window. I don't know what difficulty means in that condition. There's cable installed in the wierdest situations, and I don't know if they are difficult or not, but you will find antenna bound leads that [250] are carried through rooms in the house. You will find it stapled to the side of the wood, of the shingles. You will find all sorts of installations, and, again, if someone is trying to receive off-the-air television and there is a signal avaialable. I find it hard to even conceive that a difficult, meaning not a very easy installation, would preclude the use of or having an outside antenna.

Q: Based on your experience in the industry and over the period of your professional life, is it your understanding that the phenomenon of home viewers being unable to have outside antennas because of difficult transmisison line runs is a frequent occurrence?

A: No. Not at all.

Q: How often does it occur, if you know?

A: It's hard to conceive often. The only difficult run that I have ever experienced myself is one where the antenna had to be, the transmisison line had to be fed to a second building and then back to the first building because there was no way to get through without making a hole in the roof, but there was a way to [251] get through by going to the next building, and that could be classified as difficult, but it didn't stop them.

Q: Have you ever heard of anybody who was unable to obtain an outside antenna, unable to obtain an outside antenna because of a difficult transmisison line run?

A: I have never heard of any such situation.

Q: Have you ever heard of anybody who was unable to obtain an outside antenna because of inadequate mounting methods, whatever that means?

A: No, because in every case I am just trying to think of what real world situation that could be. If the structure is a very old wooden house and there was no way to fasten the eaves of the house, the procedure is to, and I have done this myself, is to put a tall pole on the side of the house and set it on the ground and just fasten it to the side of the house in a manner which doesn't put all the weight on the house but puts it on the pole, and so, no, I have never—I mean, there's answers to almost every situation.

Q: What about hazardous installation [252] procedures? Have you ever heard about people being unable to put up an outside antenna because of hazardous installation procedures?

A: The only thing that I can provide there is that the roof is to steep and is made of slate so that the homeowner wouldn't go on it but the installation contractor would be happy to go on it, so they weren't precluded from putting up an antenna.

Q: I take it you don't know about et cetera?

A: I am not familiar with et cetera.

Q: With respect to paragraph 39, under what circumstances could you hypothesize all viewers in Chicago being forced to rely on their indoor antennas?

A: There's no circumstance that I could hypothesize that would cause that to happen.

Q: Do you find the last sentence of this paragraph, therefore, to be helpful in analyzing the quality of broadcast reception in the Chicago area?

A: No.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of JAMES NICHOLAS DERTOUZOS taken on behalf of the Plaintiff held at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, 701 Pennsylvania Avenue, N.W., Washington, D.C., commencing at 9:33 a.m., Thursday, May 4, 1995, before Deborah C. D. Shumaker, Notary Public.

* * * *

[44] Q. You can drop "local" from the question.

MR. SOKLER: John, there is nothing but a local station in my definition, but if you want to quibble, we can prolong this.

Q. Go ahead, Jim.

A. I have not taken a broad perspective on the effects of "must-carry" on the broadcast industry as you have defined it.

Q. And by a broad perspective you mean you have not—your report is not attempting to address that issue?

A. In the broad sense, no.

Q. In the narrow sense, how?

A. My analysis, although directed on the, directed at the incentive of local cable operators to deny carriage to local broadcast stations, inevitably requires some analysis of the effect on some subset of broadcasters. I have not directly done any analysis directed towards the actual impact on broadcasters not carried. I have not done any analysis on the number of broadcasters who [45] would be affected now or in the future by the absence of a "must-carry" regulation nor have I looked at the impact

on broadcasters that compete in the local marketplace who will be carried regardless of whether or not there is "must-carry", so I have not comprehensively studied the effect on broadcasters.

MR. LANDIS: May I have that answer back, please.

(Record was read as requested.)

MR. LANDIS: Thank you.

BY MR. SOKLER:

Q. As you sit here today do you have an opinion as to whether broadcasting, as we have defined it here, would be in jeopardy in the absence of a "must-carry" set of regulations?

A. Are you limiting yourself to your definition of broadcast stations in that question as opposed to broadcasting?

Q. Yes.

A. I have not developed an opinion in conjunction with my preparation for this case. It's not an issue that I have been asked to examine.

[46] Q. And is it an issue that you intend to offer an opinion on in your testimony in the case.

A. My testimony will address the economic viability of a subset of broadcast stations, but my testimony will say nothing about the economic viability or vitality of the broadcast station industry.

Q. How would you define the subset of broadcast stations that your testimony will in fact address?

A. Stations on the margin of cable operator decision-making now and in the future.

Q. In that answer stations refers to commercial broadcast stations and non-commercial broadcast stations?

A. Yes.

Q. In the context of your answer, what did you mean by "on the margin"?

A. Those stations that are not in the category of decision-making such that cable operators have every incentive to carry them and for which "must-carry" is likely to be irrelevant now or in the future.

MR. SOKLER: Can I have that answer [47] read back.

(Record was read as requested.)

A. That's convoluted, but it says what I meant.

Q. Let me try to have you help enlighten me, be enlightened on what you are meaning.

Stations on the margin of cable operator decision-making, is your definition of the subset those stations in which cable operators would not in the absence of "must-carry" have sufficient incentive to carry anyway?

A. Correct.

* * * *

[64] Q. One that is sufficiently different to change behavior?

A. The 4 percent—I wouldn't focus attention on the 4 percent necessarily but in the change in the importance of advertising and to which operators that 4 percent is distributed, so it's not just—I wouldn't focus attention exclusively on the 4 percent but just the increase in advertising's importance and increase in the incentive to deny carriage.

Q. Is this increase to 4 percent, to whom gets it, in your view sufficient to outweigh what you have identified as the counterincentive to carry broadcast stations?

MR. TYLER: I will object to the sense I think you mischaracterized his previous testimony within the context of that testimony, but you can answer.

A. The increase in the importance of advertising to cable operators in general has [65] increased the incentive on the margin of cable operators to deny carriage to broadcast stations that carry during the period 1985 and 1992 and, perhaps more importantly, their incentive to add new stations that are emerging as we speak and are likely to emerge in the future.

Q. In your view, would a CBS affiliate be a station on the margin, as you have defined it?

A. A CBS affiliate in the past or as we speak today is not likely to be on the margin.

Q. How about an NBC affiliate?

A. Not likely to be on the margin.

Q. An ABC affiliate?

A. Not likely to be on the margin.

Q. Fox?

A. Less likely to be—more likely to be on the margin but not very likely.

Q. Based on your data analysis did you find Fox stations on the margin?

A. I did not explicitly look at that issue.

Q. In your view, would all PBS affiliates be stations on the margin?

A. On the margin, I haven't studied [66] explicitly whether or not where PBS stations lie on the margin, but they are for one reason less likely to be on the margin, for another reason, more likely to be on the margin, and how that plays out in the future I can't tell.

* * * *

[68] Q. Is there any way to define based on your study characteristics of, quote, stations on the margin of cable operator decisions?

* * * *

[69] A. I could define it in general terms, yes. In specific terms, I am uncomfortable doing that.

Q. Let me solicit your testimony in defining it in general terms.

A. Okay. An unestablished independent commercial station that cannot be received over the air without an expensive investment in antenna equipment is the most likely candidate now not to be carried. It may not be that way in the future, but that's currently what characterizes the current situation.

Q. Is it, therefore, your opinion that in the absence of "must-carry" rules those stations that you just defined by those characteristics are the stations most likely not to be carried by cable operators?

A. Those are one of the categories of stations that are not likely to be carried. I mean, to put it in the most general terms, it's the ones for which the costs of carrying most exceed the benefits of carrying, and I believe currently [70] that those types of stations would fit into that general category, but I'm not positive that's the case, and I am certainly even less positive that that would be the case in the future.

Q. For now just focusing on if the current rules went away tomorrow, are there any other categories or stations with particular characteristics that would be put on your list based on your work that would be those stations likely not to be carried or likely to be dropped by cable operators?

A. New stations in the market would be most likely not to be carried, and stations that are potential competitors for local advertising are most likely not to be carried, and those for which there would not be a subscriber revolt are the most likely not to be carried.

Q. You put in that new station category no matter what affiliation they had with any existing or emerging network that they were able to obtain?

A. Well, that certainly changes the calculus, but it would simultaneously increase the benefits and the cost, and I don't have any [71] firsthand evidence of what those are in quantifiable terms, and so, therefore, I do not have any opinion.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of ELDON J. HAAKINSON, a witness herein, called for examination by counsel for Plaintiff Discovery Communications, Inc., in the above-entitled matter, pursuant to agreement, the witness being duly sworn by JAN A. WILLIAMS, a Notary Public in and for the District of Columbia, taken at the offices of Caplin & Drysdale, One Thomas Circle, N.W., Washington, D.C., 20005, at 9:40 a.m., Thursday, May 4, 1995, and the proceedings being taken down by Stenotype by JAN A. WILLIAMS and transcribed under her direction.

* * * *

[5] Q. Mr. Haakinson, could you please state your full name for the record.

A. It's Eldon J. Haakinson, H-a-a-k-i-n-s-o-n.

Q. And could you state your address for the record, please.

A. 2500 Ravenwood Lane, Lafayette, Colorado.

Q. And by whom are you presently employed, sir?

A. The U.S. Department of Commerce.

Q. And are you employed in any particular [6] office or division of the Department of Commerce?

A. The Institute for Telecommunication Sciences.

Q. And where is that located?

A. Boulder, Colorado.

MR. LOCKWOOD: I would like to have the court reporter mark as the first exhibit for today and let's use the terminology Haakinson Exhibit 1, please.

(Haakinson Exhibit No. 1 was marked for identification.)

Q. I'm handing you, Mr. Haakinson, what we've marked as Haakinson Exhibit 1. Could you please just identify that for the record.

A. This is the report that I had prepared at the request of the Department of Justice.

Q. And you had prepared that report in connection with the pending litigation, Turner versus FCC?

A. Right.

Q. I don't want to repeat stuff that's in your report. The first four paragraphs set out some biographical and professional information with respect to you. Is that an accurate summary [7] of at least some of the experience and education that you have?

A. Yes, it is.

Q. To flesh out a little bit of some of the material set out in those four paragraphs, when you were at Bell Labs between 1965 and 1972, you state that you worked on the development of advanced radars; is that correct?

A. Uh-huh.

Q. Could you describe a little more fully for us what the nature of that work involved?

A. Okay. This was the development of the Nike antiballistic missile system that was a phased ray radar system that was developed. I worked on the antenna and systems area of the tests. I also spent two years in Kwajalein making field measurements with the Nike system.

Q. You said two years in—

A. —Kwajalein, Marshall Islands.

Q. K-w-a-j-a-l-e-i-n?

A. That's right.

Q. And then you left Bell Labs and began to work at ITS in 1972; is that correct?

A. Right.

Q. Could you describe for us in sort of [8] time segments that seem convenient to you what your work at ITS

has consisted of since 1972, the types of projects that you've been involved in, and the assignments that you've had?

A. Okay. The types of work that we've been involved in have changed a little bit. In the organization in the early fifties, sixties, and seventies was primarily a basic research area. We've now moved more into applied research. And that's again because of a change in the government's attitude about some of these things.

Early on it was making measurements of antenna systems, making measurements of propagation losses for various systems, et cetera. And now we're looking at more complete effects on systems; for example, most recently we've been making measurements for the high definition television to understand the problems with multipath for the new digital systems.

In my group we also do system studies for various agencies to help them plan and decide upon what is the best as far as telecommunications systems to meet their needs.

[9] Q. These are for governmental agencies?

A. Primarily, yeah.

Q. Just so we can get some time frames associated with some of this, you described initially the organization as doing basic research and then moving to applied research. Approximately what time period, was that a gradual thing or was there some sort of a date that you could put the change?

A. It was pretty much gradual. And it's actually tied to one of the administrations, but I can't remember which one it was. But the goal I think at the time of the change was for the government laboratories to provide more not consumer but product oriented research rather than just basic research, it was decided to leave the basic research for private companies to do.

Q. Now, what was your sort of title or job description when you first started work at ITS?

A. Electrical engineer.

Q. And how long did you retain that title or job description?

A. All of us are still—there are 60—roughly 60 percent of all the employees at ITS are electrical engineers and that's the titles we [10] all have. We don't have things as senior electrical engineers, et cetera, it's just one level.

Q. Is there any kind of administrative hierarchy within ITS?

A. Yes.

Q. Are you situated anywhere in that hierarchy, are you at the electrical engineer level or what?

A. I'm an acting group chief.

Q. And could you describe what that means in terms of your job responsibilities?

A. Yeah, I have personal responsibility for about 16 people, electrical engineers, programmers, and a few mathematicians.

Q. Now, does the group that you work with have any particular area of focus within the organization or do you just kind of do whatever projects the organization decides to send you or what?

A. Actually as engineers we're expected to be able to work on any project that comes into the organization for work. My area that most of us work on, though, is in wireless or radio systems.

[11] Q. How long have you been a group chief?

A. Four years.

Q. Did you have any sort of administrative type position prior to being the group chief?

A. No.

Q. You were an electrical engineer in the way you described earlier?

A. Well, administrative—we break it down into two areas. One is administrative people which a group chief and above. We also have project engineers who are responsible for projects.

Q. Is that an ad hoc type of thing or are there sort of sequential ways in which you move from electrical engineer to project engineer, if you understand what I'm driving it?

A. If the supervisor feels that you are capable of administering a project, that's, you know, deciding what resources are needed and managing those resources throughout the project, then he'll assign people to be project leaders. Certainly we have senior people who are excellent technically that are not project leaders.

Q. Have you been a project engineer?

A. Yes.

[12] Q. Could you list for us unless it's sort of grotesquely long the projects and the approximate dates that you've been project engineer on?

A. Let's see. Probably one that was most recent was the development of a telecommunications plan for the Forest Service. And that was just completed last year and ran for about three years, about three-quarters of a million dollar project. I have had responsibility for making field measurements on systems such as the radiation of CATV systems into the FAA bands, spectrum. Then we've had measurements to study the AM stereo system that was proposed and to try and determine of the two systems which was the better of the two. I have made measurements and analyzed data for MF radio systems.

Q. Sorry to interrupt, but what is an MF radio system for us laypersons?

A. The samé thing as AM broadcast. Again it's just a variety of systems, anywhere from very low frequencies to very high frequencies. And basic research projects, just making propagation loss measurements to developing [13] complete systems.

Q. Now, are the four matters that you mentioned specifically, the Forest Service, the CATV, the AM stereo, and the MF, were those projects that you were project engineer for?

A. Yes.

Q. You gave us the time frame for the telecommunications plan. When was the project involving the measurement of field systems for CATV into the FAA band, when did that take place?

A. That was probably in the eighties, but I'm not sure what time frame that was.

Q. Specifically on that project, when you used the phrase CATV, are you talking about a community antenna television as opposed to a cable system with a head end?

A. It doesn't make any difference, it's really the cable TV band that we were interested in, because—well, I guess it does make a difference. If you say that community antenna television systems only carry the broadcast signals, then it does make a difference, because the problem there that we were investigating was CATV carries the frequencies that are used by the FAA, they carry those frequencies on cable. [14] And the problem is, if there's leakage from the cable systems into the FAA bands, it can cause problems to the systems the FAA operates.

Q. Could you describe for us generally how you looked into that and what conclusions you reached, you being you and your team.

A. Uh-huh. The process there was to pick representative systems that the CATV people had suggested. And we went out and made field measurements of the radiation that was coming off of the amplifiers and off of the cable. The conclusion was that the cable industry could monitor their own systems by making mobile measurements, drive by measurements, and measure the signal level at a certain distance from the cable and get a feel for how well their systems were operating.

Q. The leakage measurements that you made primarily you said at the amplifiers, you mean the head end where the signal is generated?

A. That's where the signal is going to be the strongest, sure. But you can imagine that in some cases people take a gun and shoot at a cable that's hung on a pole

line system and now all of a sudden you've changed I think from cable to [15] what we call a leaky coax. It's the same thing as an antenna at that point. And that was one of the things that the cable industry was worried about.

So we had actually made measurements, field measurements, on a field site we have north of Boulder where we constructed cable that had been stripped back like that or shot at or whatever else to try to get an idea of what kind of leakages could be expected.

Q. Had there been problems from the government's perspective, the FAA perspective with leakage that were a part of the facts that precipitated this study?

* * * *

[16] Q. * * * [A]sking your understanding of what you were informed, was whether or not the study was generated by the experiencing of some sort of problem, that there was interference let's say as a result of leakage, or whether it was just wanting to know what the facts were?

A. Well, you have to understand the [17] mind-set of the FAA. Their idea of interference is absolutely no interference, not tolerable interference, no interference. This was a concern for them as a potential problem. Whether it was ever manifested I don't know.

Q. It wasn't expressed to you?

A. Not to me personally.

Q. I think it probably goes without saying from your report, but just to nail some things down, you've never worked in the broadcasting industry; is that correct?

A. That's correct.

Q. You've never constructed or supervised or been involved in the construction of a TV transmitter?

A. No.

Q. You've never been involved in the commercial development of either transmitting or receiving TV antennas, have you?

A. No.

Q. You've never been involved in the construction or supervision of the construction of a cable system; is that correct?

A. That's correct.

Q. You've never been involved in the [18] manufacture or design of commercially available TV or cable equipment?

A. That's correct.

Q. I take it from your report that you have never testified as an expert witness before; is that correct?

A. Correct.

* * * *

BY MR. LOCKWOOD:

[56] Q. With respect to the maps with the grade A and grade B contours, the terrain dependent maps, and the FCC maps for that matter, it's true, is it not, that the outside of the grade B contour is not a determinant necessarily of the quality of the picture that someone can receive on their TV receiver?

A. That's true.

Q. And that, even if the field strength, [57] for example, outside a grade B contour is below, generally below, the FCC predicted 50/50 field strength, someone with either a favorable terrain location, say up on a mountain, or with a very strong receiving antenna or with an antenna mounted very high in the air could under some circumstances at least get a good picture outside the grade B contour of the transmitting station?

A. Yes.

Q. And the terrain dependent mays that you folks have produced are no more and no less than predictions as to field strength quality—or as to field strength in the contours that those maps generate?

A. That's right.

Q. Turning to paragraph 18 of your report, the second sentence, you first say the percentage of households

not covered or lost from the comparison depends upon the local terrain. Just to make clear, when you use the phrase not covered or lost from the comparison there, what you mean and as you indicated earlier is simply that the household or viewer is outside the grade B contour; is that correct?

A. Or the grade A, yes.

[58] Q. Or the A as the case may be?

A. Yes.

Q. Now, when you say the problem is present in many of the larger TV markets, what do you mean by the problem?

A. That this difference between the FCC curves method and a terrain dependent method produces this difference in households.

Q. Now, it's true, is it not, that at some level, even if it's only one household, a terrain dependent may will always produce a different result than an FCC contour map, won't it?

A. I would expect that to happen, yes.

Q. So, in order to determine the extent of the difference, whether it's one household or a million households, one has to look at each location?

A. That's right.

Q. And prepare an FCC contour map and a terrain dependent propagation map and compare the results, correct?

A. That's right.

Q. Now, when you say the problem is present in many of the larger TV markets, what quantification of the problem are you intending [59] to refer to there?

A. We weren't trying to quantify it because as you say we haven't done an exhaustive comparison. It's just, from our knowledge of terrain features in a lot of the TV markets, we expect this problem to occur, this difference to occur.

Q. But the terrain features are significant in terms of numbers of viewers affected, not merely by geography but also by the location of the population within the geography; isn't that true?

A. State again, you say the percentage?

Q. The number of viewers or households that would be outside the grade B contour in a terrain dependent map as compared with an FCC contour map is not merely a function of the geography where the field strength is predicted to be different but in the population of the area in which the field strength is predicted to be different; isn't that true?

A. We are computing area, population, and households. Certainly the households and population ought to be strongly correlated. Are you suggesting that the area and the population [60] should be strongly correlated as well?

Q. No, I'm just asking—I had asked you earlier whether you needed to prepare a terrain dependent map with the attendant population figures to determine the impact on a given TV broadcaster, and you said yes, and then you said something along the lines of we know there are these terrain problems in other areas.

A. Yes.

Q. Terrain is geography. You need two factors to determine the impact on viewers, one is the geography and the other is the number of people in the geography that's different or in the shadow. Hypothetically, if I have a transmitter in an area and ten miles from the transmitter there's the Rocky Mountains but there's nobody on the other side of the Rocky Mountains, then the fact that the terrain dependent map would show a much different contour would be significant because the people affected would be zero as a hypothetical, correct?

A. Yes.

Q. That's simply what I'm trying to get at. So you need to know not merely the shadows created by the

terrain but the population within [61] the shadows; isn't that correct?

A. Uh-huh.

Q. Now, when you said you were familiar with the problem as being a matter of terrain in other areas, were you also intending to say that you knew both of the terrain and the population and the shadow created by that terrain?

A. We certainly have databases of population and terrain for all those areas, yes.

Q. Did you use those databases in identifying other broadcast areas besides Denver and San Francisco that you were intending to refer to when you said the problem is present in many of the larger TV markets?

A. This is just from knowledge of where the other markets are located. A lot of them are located in areas that have a lot of terrain features.

Q. And you're familiar not only with the terrain features but with the percentage of the households in those markets who are in the shadows created by those terrain features without having to go to your database to actually derive that information; is that what you're saying?

A. We would have to go to the database to [62] derive that information, yes.

Q. Did you?

A. No.

Q. Specifically directing your attention to the reference to the Los Angeles basin, can you tell me how many households are outside the grade B—how many more households are outside the grade B contour of a principal Los Angeles television station if you use a terrain dependent propagation map as compared with an FCC contour map?

A. I can't tell you right now, no.

Q. Did you know that and forget it in writing this down or how did you determine that Los Angeles presented the problem?

A. I've looked at some of the calculations that other people have made for the L.A. basin, but it's not one that I've done for this particular study.

Q. Do you have a recollection based on your looking at other people's calculations as to how many households are outside the grade B contour using a terrain dependent model as opposed to the FCC contour model?

A. No, I don't.

[63] Q. You mentioned then San Francisco and then you have et cetera. What are the markets that are intended to be referred to by the term et cetera?

A. San Diego, Seattle, Albuquerque, certainly all along the front range in Colorado, most of the communities in the Western states that are in places like Utah.

Q. Well, we're talking about many of the larger TV markets in this sentence.

A. Yes.

Q. So what larger TV markets are in Utah and the front range of Colorado other than Denver?

A. Okay.

Q. I'm asking you what the et cetera means in the context of the sentence that you wrote it in?

A. In this case it was places like Seattle and San Diego.

Q. Albuquerque?

A. Albuquerque, if you consider that one of the larger markets, I don't think it is.

Q. Do you?

A. No.

[64] Q. What about Salt Lake City?

A. Again I'm not sure—it's certainly going to have this effect. Whether you consider it a larger market I'm not sure.

Q. Any other cities that you can think of, larger market cities?

A. Not right now, I don't remember any.

Q. San Diego, do you know how many households are, in effect, removed from the grade B contour through

the use of a terrain dependent model as opposed to an FCC contour model?

A. No, I don't.

Q. Do you have any idea order of magnitude?

A. No.

Q. What about Seattle?

A. The same thing.

Q. Salt Lake City?

A. The same thing.

Q. In paragraph 19 you talk about multipath and we've talked about that a little bit already. First what data do you have knowledge of that would reflect the number of TV households nationally whose received signals do not provide a picture of acceptable quality to [65] use your phrase as a result of multipath?

A. I don't have any national data.

Q. In paragraph 20 you talk specifically about Chicago, Denver, and San Francisco.

A. Uh-huh.

Q. And you say that the amount of area lost is not easily quantified, but the resultant annoyance is well documented. First, whether it's easily quantified or not, have you quantified it at all, the amount of area lost due to multipath in those three cities?

A. In both Denver and San Francisco, we have made measurements of multipath.

Q. And what did those measurements show in terms of the number of households in those two cities that are unable to receive a picture of acceptable quality today?

A. Okay. There's no correlation between the measurements and the quantifiable number.

Q. So what do the measurements show then if they don't show the quantifiable number?

A. What it shows is the channel characteristics in several different archetypes and it gives the level of the primary signal relative to the multipath signals.

* * * *

[89] A. No.

Q. In 21 there's a reference there to having more multipath with omnidirectional antennas. What type of an antenna were you referring to as an omnidirectional antenna?

A. Crossed dipole.

Q. Did you in your study observe a substantial number of TV households in Denver or San Francisco using omnidirectional antennas?

A. The intent of the omnidirectional antenna was to act like a point source—not a point source but maybe a point sink in this case. It allows us to look at all the multipath that's available at that point. That's why you use an omnidirectional antenna.

Q. So you were using it just as a test mechanism, not as something that purported to be representative of what people in the real world actually used as antennas?

A. Yes.

(Discussion off the record.)

MR. LOCKWOOD: Back on the record.

BY MR. LOCKWOOD:

Q. Mr. Haakinson, directing your attention to paragraph 23 of your report now please, in the [90] last sentence of that paragraph, you state that a radio signal that may on average be strong enough to provide good reception will experience many locations where the radio wave has been blocked by terrain or buildings called shadowing or cancelled and distorted by reflections called multipath.

Can you quantify for me what you mean by many locations in terms of the number nationally of TV households that you're referring to?

A. No, I couldn't.

Q. Are you aware of any data that's publicly available anywhere where someone could derive that sort of information?

A. That's the correlation between signal blockage—

Q. The correlation between signal blockage and number of affected TV households.

A. No, I don't know that.

Q. If I asked you a similar question about your statement in paragraph 24, that getting a high quality TV signal from an individual viewer antenna is still often a challenging and troublesome endeavor, could you quantify what you [91] mean by often?

A. Quantify?

Q. In other words, the number of TV viewers for whom it would be a challenging and troublesome endeavor?

A. No.

Q. And I take it that you're really making the same point in the first sentence of 20 that you are in the last sentence of 23, or are you intending to make a different point.

Q. What's the difference?

A. The last item in 23 is how the FCC would recognize that the signal is not the same; given a geographical point, the reception by different home viewers along the block or so is not the same uniformly. And that's part of what they discuss at 50 percent of the time, 50 percent of the locations, that this signal does vary from location to location and from time to time.

* * * *

[109] A. It would follow that type of loss. In other words, it would increase as we went up in the value of the channel, like 14 through 69 or 83, there would be more loss for the coaxial cable than there would be for channels 2 through 6.

Q. How many dB let's say for the UHF?

A. I don't know offhand.

Q. Do you have any idea of an order of magnitude, are we talking about two dB, five dB, or ten dB?

A. That's the range.

Q. What, two to ten?

A. Yeah.

Q. But between those two you can't point me as to which is the actual range for UHF?

A. I don't know off the top of my head.

Q. In any event you—well, Mr. Stern testified the other day that there are 36 million more or less TV viewers in the United States that receive over-the-air television and not through a cable today. Is that number approximately what you would accept as the number of people?

A. I think that's the number that I remember from the TV Fact Book, yes.

[110] Q. How many of those 36 million people have unacceptable reception because of inadequate receiving antenna installations?

A. I have no number on that.

Q. Do you have the view that, if somebody gets unacceptable TV reception over the air because of let's say a low quality antenna or a poorly located antenna, that they generally don't do anything to correct it?

A. Yes.

Q. And what's your basis for making that assumption?

A. Our Peoria-Chicago measurements.

Q. Anything else?

A. Just personal experience.

Q. And your personal experience consists of what in that regard?

A. That most people haven't seen studio quality television to know how to really judge what poor reception looks like.

Q. Somebody who received cable, would they tend to know what good reception looks like?

A. I don't think you can generalize, because I think there are poor cable transmission facilities around the U.S. as well as poor [111] antenna installations for home viewers. So I don't think you can generalize that.

Q. Well, apart from studio quality, there are certainly viewers that have seen excellent quality TV signals, aren't there?

A. Yeah, I guess you would have to ask the individual what he considers to be excellent, yes.

Q. Well, you've testified that people aren't going to correct unacceptable pictures because essentially they don't know that they're unacceptable; isn't that right?

A. Uh-huh.

Q. And the basis for that was that most people in your opinion haven't seen good TV signals. What empirical data do you base those statements on?

A. Again it was from the measurements that were made in Peoria and Chicago. Part of the questionnaire that they had the people fill out was to evaluate their signal, the quality of their signal prior to making the measurements. And obviously the database is rather small, in this case it was around 50 sites. But people were saying I have excellent [112] quality reception and they walk in and the people who are making the measurements, in their view, they said it was a very snowy picture, that it was not really acceptable to them.

MR. LOCKWOOD: Mark this as exhibit Haakinson 2, please.

(Haakinson Exhibit No. 2 was marked for identification.)

BY MR. LOCKWOOD:

Q. I'm handing you what I've had marked as Haakinson Exhibit 2. Is that the Chicago-Peoria study that you've been referring to?

A. As far as the signal measurements, yes.

Q. Does that study contain any information about what people's views of the quality of their picture reception was?

A. No, they didn't include that in the report.

Q. Why not?

A. I think—well, because it wasn't a very well prescribed definition of what excellent or poor quality reception was. When you set up something like the TASO measurements or so, they will give you a series of differ-

ent scenes with various amounts of interference. And now you can [113] make a judgment personally from what you consider unacceptable up to excellent quality, you've got a range which to view over.

And walking into somebody's home and asking them what kind of picture quality do you have, you have no reference, all you're asking them is to provide a subjective feel for that. It's not a very scientific determination of what is excellent and what is poor because the viewer has nothing to compare against.

Q. I take it it's fair to conclude that you based on your reading of Exhibit 2 here believed that the signal quality that the vast majority of the people whose homes have been surveyed in that study were getting was quite poor; is that correct?

A. A vast majority, yeah, if we go by the numbers that came out in the study, yes.

Q. And yet, according to the questionnaires, those people generally regarded the signal as adequate?

A. Yes.

* * * *

[129] Q. So, although the measurement of the gain would be the same at various distances, the amount of gain needed to get a good quality picture would vary with distance?

A. That's true.

Q. But again you all were not testing picture quality? When I say you all, I mean NTIA.

A. Yes.

Q. Is that correct?

A. Yes.

Q. How was the number 50 decided upon for the size of the sample?

A. I think that was the goal that the FCC and NTIA had selected as reasonable for the time period to be out in the field making the measurements and the cost of making them.

Q. Was there any to your knowledge statistical analysis done in establishing that 50 site choice to determine

whether or not those 50 sites would be representative of some larger number of TV receiving antennas?

A. Okay, I would say no.

[130] Q. If I understand you correctly, it was your understanding that it was primarily a sort of cost feasibility evaluation that went into the number of sites selected?

A. More of a cost limit.

Q. And the typicality of the tests was a function of a combination of the randomness of the intervals and the arbitrariness of the line on which the locations were selected coupled with whatever bias was in the process by having to ask permission from people to get into their house to make the tests?

A. I'm not sure what the bias has to do with it, but the rest of it I agree with.

Q. Well, without knowing what, if any, correlation there is between antenna quality and the willingness of somebody to let you in their house to check your antenna, you can't say whether there is or isn't a bias in a selection that is affected by that factor; isn't that correct?

A. That's right, sure.

Q. And indeed the authors of this study acknowledge that there is a possibility of bias resulting from that fact, don't they?

[131] A. Only in the sense they said that they had no idea if there would be a bias in the selection process. Obviously, you know, there might be people who have a scientific bent and might want to know exactly what kind of—how their antenna system was performing. And those people might be very eager to have people come in and make measurements on their system, just for a scientific curiosity.

Q. Well, didn't they have a suspicion that there might be a bias, it wasn't just a total ignorance?

A. There was none that they could detect. That's why the statement was made there, to try and illustrate there was no bias that was known to the investigators.

Q. Well, let me direct your attention to page 55, where it states, and I quote, our measured data may con-

tain bias, although we have no way in which to quantify such bias if it is there due to our suspicion that homeowners who felt they might have an antenna system problem were more cooperative with our field measurement program than were homeowners who apparently recognized no deficiency in their TV reception?

[132] A. The fellow who is the author of this said that, when they went to make the measurements in the home, part of the agreement was they would not tell them how to fix their system. They would tell them the measurement results but would not give any clue as to what things to be done to improve that reception, so that's why they feel—

Q. That leads you to conclude what?

A. That they had no known bias built into this, because they didn't offer to improve their reception if the homeowner thought the reception was poor.

Q. But, if the homeowner was interested in knowing whether his reception was in some manner or another low or poor, he would have some incentive to let somebody check it for him for free, would he not?

A. As well as the person who has a scientific curiosity about how well his system performs, yes.

Q. Well, obviously the author of this study felt that the former was more of a potential problem than the latter since he saw fit to specifically put in his report his concern [133] about the former; isn't that true?

A. I think he stated that without knowing anything about whether the homeowners that made the measurements were the ones who thought they had poor reception and were trying to have the government improve it for them versus the ones who had a real interest in knowing how their system performed and were for free getting a system measurement.

So I don't think there's any—they tried not to select those people and in truth they don't have any idea whether they selected them or not. So they warmed to, you know, alert the reader to the possibility that something like this

could happen, but in truth they don't believe it actually happened.

Q. But they have no scientifically valid basis for telling us whether it did or it didn't happen?

A. That's correct.

Q. And you don't have any scientifically valid basis for adding to our knowledge on that subject either, do you?

A. Absolutely none.

* * * *

[137]Q. So, if I understand you, you're telling us that at least in 1979 it's your opinion that the typical consumer who wished to purchase an antenna, a new antenna to improve his picture quality would not be able to describe the problems he was experiencing with reception sufficiently to obtain anything resembling an informed advice from the seller of that antenna as to what quality of component and type of configuration would likely solve this problem; is that what you're telling me?

A. I'm saying the consumer would not have access to the engineering characteristics of that antenna.

Q. What about the salesperson?

A. The salesperson probably doesn't have access to it either.

Q. What about the installer?

A. He probably does not have access to the information.

Q. Now, in expressing those views which [138] you've just expressed, what sort of empirical basis do you have for making those statements?

A. Off the record?

Q. No.

A. Testimony from yesterday, saying that the gain characteristics were proprietary.

Q. Anything else?

A. The same knowledge that I had when I went to Radio Shack and asked for the same information, they couldn't give it to me.

Q. An experienced installer, if we're referring to yesterday's testimony, would not have any idea what type of antenna would be helpful in solving a type of problem that somebody in the area that was coming to him for help would be experiencing?

A. You're asking me two different questions. One is the type, that's true, the installer would know the type. I think you also asked me wouldn't the installer have information like these gain characteristics, and I'm saying they don't.

* * * *

[147] Q. So you won't even know for any given location whether or not there would be a broadcast on the particular band for which the minus 10.3 dB receiving antenna gain existed?

A. That's right.

Q. I mean, if it was on channel 3, for example?

A. That's right. And, if I had channel 3, I certainly would not want that antenna.

Q. But, if you didn't have channel 3, you really wouldn't care about that antenna, would you?

A. That's right.

Q. So I come back, this is the best and worst of a series of tests which were done simply to determine what's the best and the worst?

A. Absolutely.

Q. And, other than your opinions about the ignorance of consumers, retailers, and installers, there's no empirical data available to say where in the real world of antenna users the average or range of antennas falls in terms of their receiving gain; isn't that correct?

[148] A. Yeah, in these combinations, there's no empirical data. However, these antennas and baluns and spliners and stuff were available for purchase.

Q. In 1979?

A. That's right.

Q. How many of them were available in 1992?

A. I have no idea.

Q. Did you hear Mr. Stern's testimony yesterday about poorer quality antennas essentially being driven out of the market?

A. Uh-huh.

Q. Did you have any basis to think he was in error in making that statement?

A. No.

Q. Your sentence below the table 2 in your text talks about that antenna technology for home TV reception has not changed over the years so that these measured values are probably true representations for today as they were ten to 15 years ago. Well, first the data you've got is, in fact, 15 years old here, right, not ten?

A. Yes.

Q. So the ten part of the range is not [149] germane?

A. Okay.

Q. Correct?

A. Okay.

Q. You heard Mr. Stern's testimony yesterday about his views on the changes in antenna technology that have occurred within the last 15 years. As you sit here now, and realizing that you may not have a perfect memory, do you recall anything that he said on that topic that you believed was wrong or incorrect?

A. I believe one of the statements was that the combiner is now more of an integral part of the two antennas, the UHF and VHF antennas, that they are of less loss now. I think that was one statement. I don't know how much less loss is.

Another statement was that the use of log periodic antennas—I believe the statement was that that was technology developed in the last 15 years or since these measurements were made. And, as he made that statement, I was trying to remember when log periodics became available for the consumers and I'm trying to remember if these antennas were not log [150] periodics.

Q. What success are you having in that endeavor?

A. I would have to go back and look at the report and see, you know, how correct he was about the log periodics being introduced since these measurements were made or whether these included log periodics. I can't remember the answer, I don't know the answer. And in truth, you know, if there is a significant increase in the performance of the systems like lower loss combiners, I think most people are using transmission—or the coax cable. In truth I haven't seen any measurements like this made in the last 15 years. If a typical combiner had a three dB insertion loss 15 years ago, if you have now a lossless combiner, the best you can do is a zero dB insertion loss so you have an improvement.

You know, I can't dispute what Mr. Stern has said and he may be quite accurate about it. I just don't have any measured data to point to and say, yes, he's right, there has been a significant improvement. And I'm not sure, even if you had a significant improvement, you [151] know, with what we're talking about, how much is significant.

Q. Well, let me ask you this, have you personally done any work evaluating the receiving antenna gain for antennas that have been manufactured in the last two or three years?

A. State that again, I'm sorry, I didn't hear.

Q. Have you personally done any work in evaluating the receiving antenna gain for television broadcast reception antennas manufactured within the last two or three years?

A. No, we have not made any measurements.

Q. Are you aware of anybody that's done any such work?

A. I'm not aware.

Q. And you don't have any knowledge about what manufacturers of TV receiving antennas are or are not doing to improve their product over the last ten or 15 years, do you?

A. Well, in truth, as we stated yesterday, the information is proprietary. I don't know how we would get

ahold of it except make measurements. So I don't have access.

* * * *

[170] Q. Why don't you point out what you're pointing to.

MR. ISSENBERG: He's pointing to the dot off the chart.

BY MR. LOCKWOOD:

Q. Right. What about that?

A. That might be an individual who is relatively close to the transmitter, seven miles, who has lousy receiving antenna gain but could still have a fine television picture.

Q. How is that possible if you go down six dB for every—you go down a grade every time you have a reduction of six dB in the signal?

A. That's right.

Q. So, within seven miles of the signal, you would need—under the FCC thing, negative gain would be enough to receive the picture such that by adding minus 19.9 to the negative gain, you would still—but the positive—excuse me, the positive gain from the antenna, you get 19.9 minus and you still have, what, a grade three picture, passable? I mean explain to me, I'm totally lost on this.

A. Well, in truth I was just trying to [171] help you speculate. And I haven't gone through the numbers, you know, this may be a ridiculous sample too.

Q. Continue.

A. In truth I guess I don't know whether that person has—how that person would judge their reception. All I can do is point to the values that were measured for these systems. And there is not a correlation between people's antenna system gains and how they viewed their—how they—what they thought of their reception, signal reception.

Q. But presumably they at least had to be able to see a picture in order to determine that their reception was acceptable, right?

A. I can give you another hypothesis, that this person was close to the Chicago transmitter, I don't know. Were there any Peoria VHF stations?

Q. No.

A. And we're measuring off the back of the antenna. I don't know what this characteristic is frankly.

* * * *

[174] Q. Okay. Thank you. Turing to paragraph 38, you list a number of reasons why home viewers are unable to have outside antennas. I'd like to go through those with you. First, with respect to installation not allowed by apartment owners, what data do you have as to the frequency or magnitude of that phenomenon?

A. None

Q. What data or information do you have about the extent to which, when an installation of an individual outside antenna is not allowed by an apartment owner, the apartment utilizes some form of master antenna system?

A. I would assume that that's probably the case.

Q. With respect to installation not allowed by city ordinances, could you list for me the cities that you know of where installation of antennas is not allowed?

A. No, I can't think of any right now.

Q. Why did you include that in your report, if you know of none?

[175] A. To tell you the truth, I'm not sure why that was listed there right now.

Q. With respect to installation not allowed by neighborhood or development covenants, could you tell me what data or information you have as to the frequency of that occurrence?

A. Pretty common in Colorado.

Q. Apart from Colorado first?

A. Well, I don't know, I don't know.

Q. What about Colorado, what empirical data you have about the frequency of that occurrence?

A. Where I live.

Q. Boulder?

A. Lafayette.

Q. Where is Lafayette?

A. Outside of Boulder.

Q. Is it a suburb of Boulder?

A. Well, they don't think so, separate.

Q. And could you identify for us the frequency of this pattern in Lafayette, Colorado, I mean how many houses are affected, what kind, et cetera?

A. They are houses that are ranging in cost from 180,000 to I believe about 2 million. [176] They number—I think the plan is to have something like 1,400 houses. And they have it written into their covenants that no outside antennas are allowed anyplace on the property.

Q. Is this a single development or a multiple development?

A. Multiple.

Q. Multiple developments?

A. Uh-huh.

Q. Are these all single-family detached homes, are they condominiums?

A. Oh, no, not condominiums. Yeah, they're all single family, there's no attached.

Q. How do the residents of these homes receive over-the-air television, if at all?

A. They probably have to do it with an antenna in the attic.

Q. Are you a resident of one of these homes?

A. Yes.

Q. How do you receive over-the-air television, if you do?

A. All of the houses were prewired for cable and that's the only way I receive it. So I don't have over-the-air television.

[177] Q. Are you aware of the extent to which, if at all, over-the-air television is viewable in Lafayette, Colorado, in the absence of cable?

A. It's pretty good, we're only about probably 20 miles from the transmitter site on Lookout, Lookout Mountain.

Q. Have you done any research or investigation into the extent to which the use of antennas in attics produces acceptable picture quality in Lafayette, Colorado?

A. No, I haven't.

Q. I take it we've discussed at some length available antenna location blocked by nearby man-made structures or terrain features. Could you describe for me first an illustration of where the implementation of an outside antenna is prevented by something called an inadequate mounting method?

A. Well, I guess we were just trying to speculate on some of these, some conditions. I know that a lot of the homes in Boulder have—I won't say a lot. There are homes in Boulder that have flat roofs that have these rubberized membrane roofs. And the problem is really trying to mount something on top of that roof because [178] it's got to pierce the rubber membrane to anchor into the joists underneath.

And the problem is that you get leakage through the piercing of the rubber membrane and you can cause thousands of dollars worth of damage if you have water leaking into that area because it just rots out the wood and stuff. So that's usually why they won't do that. I mean installers will probably do it for you, but I think you as a homeowner will probably pay the price usually. So that's an example.

Q. Well, could you mount an antenna on a mast that was attached to the side of the house near the roof that extended up over the roof?

A. That would be one thing to get around that particular problem.

Q. And, if you do that, it wouldn't prevent—that inadequate mounting method wouldn't prevent the installation of an outdoor antenna on that home, would it?

A. If in that case you could put it on the side, that would be getting around that particular problem.

Q. Or you could put up a pole in your yard and put an antenna on top of it, right, if you [179] had a yard?

A. Yeah.

Q. Could you describe for me a home that you are familiar with where there would be no alternative method of putting up an outdoor antenna or an attic antenna that would enable the homeowner to view off-the-air television signals with acceptable quality?

A. I think the point was not to find the, you know, cases where this was impossible to do, I think it was just trying to illustrate that not every option is available to every homeowner to make different types of placements and installations of their antennas.

Q. So inadequate mounting method will not generally be something that would render a homeowner unable to have an outside antenna; is that the case?

A. Yeah, probably.

Q. Could you describe for me a situation involving a difficult transmission line run that would in your language prevent the installation of an outside antenna?

A. It was more difficult than impossible I suppose. One person I know has got a poured [180] concrete house, I mean the whole structure is poured concrete. He might be able to put an antenna on his flat roof and then he's got to run the transmission line over the side. And the problem is just piercing the concrete, he's got to cut a hole—you know, get probably a diamond bit drill and drill into that and get back inside the house someplace.

Q. He doesn't have any windows?

A. Yeah. Are you suggesting he crack open a window and run the transmission line through?

Q. I'm asking.

A. Yeah, it's possible, that's what I say, it's possible.

Q. Do the windows have wooden sashes?

A. In his case I don't remember. Probably metal sashes.

Q. Could you drill a hole through a metal sash and run a transmission line through that from an antenna to a receiver?

A. I suppose. I'm not sure it looks very aesthetic coming through on the other side, having the transmission line drop down from the window.

Q. But that's not prevention or inability, [181] that's undesirability; is that fair?

A. Yes.

Q. What about hazardous installation procedures, what are you referring to there as something that would prevent the installation of an outdoor antenna?

A. A roof line that has a very steep roof.

Q. And again would that prevent a professional installer from putting an antenna somewhere on the exterior of the house above roof level?

A. No.

Q. It would render it more difficult?

A. I think we were trying to look at things that—you know, how does the do-it-yourself person do some of these things. And I'm sure a professional installer could probably get around some of these issues too.

Q. Turing to paragraph 39, you refer in there to the ITS report shows home viewers who must use indoor antennas typically have system gains that are about 25 dB lower than those measured with outside antennas. It's true, is it not, that that particular set of data is based on [182] two homes?

A. Yes.

Q. Do you consider on any basis a two-home sample to be representative of what people in the Chicago-Peoria, Illinois, area could expect to accomplish through the use of indoor antennas?

A. Are you asking me if the 25 dB is representative?

Q. Yeah, based on two homes and their selection of whatever antenna they happen to buy and whenever they happen to buy it.

A. The receive signal strength is—well, there's something that engineers call height gain. And that's kind of a hyphenated word that, as you raise an antenna, even though it's got the same gain, it presents more signal at the terminals of the antenna.

And, even though you're using the same antenna, you raise it and the signal goes up; it's kind of a rule of thumb. One of the things we use is, every time you double the height, you get about a six dB increase in signal level. Now, this is probably truer closer to the ground than higher up, you certainly wouldn't get that if you were in an airplane.

[183] Let's just talk about close to the ground. If I have an indoor antenna that's maybe at eight feet above ground and now if I raise that to the second floor or equivalent to 16 feet, I've probably doubled the voltage or have a six dB improvement in the signal strength. I'm at 16. If I double that, I get up to 32 feet which is about the height of the outside antenna. I've also gained another six dB. There's 12 dB in height gain right there. The other thing is that the indoor antenna has to contend with penetration loss going from the outside to the inside of the building. You know, numbers range from maybe five to 20 dB of penetration loss. So, if I take the 12 and now add five to that, that's 17. If I take 20 to that, that's 32. So I think the 25 db—you know, poorer performance is not out of line.

Q. That assumes, if I understand correctly, that, number one, all indoor antennas are used on the first floor of a home?

A. That assumption is—yes.

Q. And you don't have any basis statistically for assuming that that is true [184] nationwide about indoor antenna use, do you?

A. No, no. We're only talking about those two antennas.

Q. Right. And I asked you you'll recall whether you regarded those as representative of the experience nationwide of the users of indoor antennas and you gave me—

MR. ISSENBERG: The question was actually whether they were representative of the Chicago-Peoria.

BY MR. LOCKWOOD:

Q. You're right, fair point.

Chicago-Peoria.

Are you telling me that, in giving me that answer, that you believe that in the Chicago-Peoria, Illinois, area those two homes and all other TV homes in that area have indoor antennas utilized only on the first floor of dwellings?

A. I couldn't answer that. I think what I'm trying to answer is the 25 dB, you know, just from sitting here and thinking about sort of rules of thumb and from past experience, the 25 dB difference in performance of the outdoor versus the indoor doesn't seem unreasonable to [185] me.

Q. But six of that is based on an assumption that you use it on the first floor rather than the second floor. And another six of that is used on the—I don't know, maybe three of that, I'm not sure, is used on the assumption that it's not used on the third floor, correct?

A. Well, can you get a third floor in a 30 foot house? I mean these antennas are mounted 30 feet above ground, right?

Q. I'm not making any assumptions about the height of houses in the Chicago-Peoria, Illinois, area, are you?

A. Yeah, I think that all of the measurements were made at 30 feet. All of the reference antenna was set at 30 feet.

Q. I understand that. But the actual antenna in the home is the one that you're measuring the gain on, not the reference antenna.

A. For the interior measurements, they still left the reference antenna outside the house at 30 feet and made a difference in the signal level, reference gain between what would be available at 30 feet versus what was inside.

[186] Q. Well, if the first floor ceiling is eight feet tall and the second floor ceiling is 16 feet high, then the third floor ceiling could be 24 feet high and you could put an indoor antenna on the valance to use Mr. Stern's word at 24 feet. Wouldn't that give you some height?

A. That gives you some height gain, right.

Q. And how many dB would that account for of your assumed 25 dB difference, nine or 12?

A. Oh, gosh, I don't know. What I'm trying to say is, if I had a value of signal level at the eight feet and then just doubled it, as a rule of thumb, each time you double the height, the signal strength goes up six dB.

Q. But I come back to my question. You got two houses here. According to your map, in the Chicago area alone, the terrain dependent map which doesn't include Peoria, you have 2,744,000 households in the grade A area and 256 or 258, I guess I better use the good map here, and doesn't include Peoria, 256,000 households in the grade B area. That's a total of approximately 3 million households.

Do you know any basis for taking two out of 3 million households who have [187] idiosyncratically chosen the type and location they place their indoor antenna and deriving some sort of average that the people—that the householders in the Chicago area could expect to receive through the use of an indoor antenna as compared with the use of an outdoor antenna?

A. In one case it's two measured values. And my other statement is the measured values are not unbelievable. Other than that there's no other data that I can look at and say, yes, this is representative of the city of Chicago, you know, there's no way I can do that with this data.

Q. Well, you've already talked about a different study where they talked about 12 outdoor antennas, as I recall they didn't deal with indoor antennas, but they found a wide variation between the worst and the best in terms of dB's?

A. Yes.

Q. Can you tell me of these two houses whether these two indoor antennas had the worst or the best or the median antenna, indoor antenna that they were using?

A. No, I couldn't tell you.

[188] Q. Could you tell me where those indoor antennas were located in those houses?

A. It might say so in the report, right now I can't tell you. I don't know.

Q. Can you tell me what the house walls were made of in terms of penetrability by radio waves?

A. That wasn't part of the measurement project.

Q. But it would be part as I heard your earlier answer of the potential difference between an outdoor antenna and an indoor antenna?

A. Yes, I was referencing another NTIA report that references that. I think you've got copies of that.

Q. So there are at least three factors, the walls, the location, and the choice of the owner as to get a good or a bad antenna that are variables, correct?

A. Yes.

Q. At least three. And you don't know the specifics or at least you can't remember any of the specifics of these two households as to how those three variables affect those two installations, correct?

[189] A. That's right.

Q. And, apart from whether you could go back and attempt to figure it out now, when you wrote this report, did you attempt to evaluate these two households in terms of quality of antenna, height of antenna off the ground, and substance of which the walls were constructed to determine whether or not they were the worst or the best or something in between for purposes of this evaluation?

A. No.

Q. Did those two locations, were they among the two that told your folks that they were getting an acceptable picture?

A. I don't know.

Q. How did it come to pass, if you know, that, of the 50 locations you sampled, only two had indoor antennas, was that just fortuitous?

A. If you look at table 1, page 5 of the report that's Haskinson 2, it shows that the residence No. 6 had two antennas, where it says type of antenna, four was in the attic which was an urban outdoor VHF and 11 was an indoor UHF loop, and residence No. 11 was an indoor UHF/VHF combination. And it looks like those were the [190] only two residences.

Q. Well, my question was was it just chance that only two of the 51 locations were using indoor antennas or was there some effort made to focus the study only on outdoor antennas or how did it come to pass that only two of them had indoor antennas, if you know?

A. I don't know. But I see that, when I said residence 11, it looks like residence 12 is the same location. And I'm not sure what (FS) and (PS) means, but two was a suburban outdoor VHF/UHF combination. So apparently they noticed that these people had an outdoor antenna; when they got inside, they found out they had a UHF/VHF combination. They made measurements on both sets.

Q. So, in fact, there really weren't 50 locations, there were 49 locations?

A. Yes. Well, I don't know.

Q. Well, I notice, for example, in numerous other instances where there's two different antennas, for example, residence 21, residences 37 through 44, that they list just a single residence. Then, on residence 35, 36, and 37, I don't know whether those are three [191] residences or one residence. So I'm a little puzzled as to the number of locationse here.

A. Okay. I think I can figure it out. If you look at residence No. 3, you'll notice it says type of antenna, 4, 5. And, if you look at the listing, it says an urban outdoor VHF and then an urban outdoor UHF. So I assume they're mounted on the same mast. So they're probably saying that is the same physical location. And the same for residence 21, 8, 9, one is a UHF antenna, one is a VHF antenna. I think probably for the study that was the same location, whereas the one that had the indoor one, it was probably located downstairs—I'm speculating, someplace inside the house, and the other one was clearly located outside the house. So I think they probably said for the purposes of this study two locations.

Q. To get back to the main point, the fact that there are only—you don't know why there are only two locations that were selected for this study that had indoor antennas?

A. Yeah, I don't know.

Q. Had you been attempting personally to study the gain characteristics of indoor [192] antennas, would you have attempted to secure a larger number of samples than two?

A. I'm trying to look through the introduction and see what the goals were set out for. This was a report done I believe for the FCC. I think it depends on what their goals were as to whether they should be all outside antennas or a mix. It would depend on how the FCC had structured the project.

Q. Well, if it was to be all outdoor antennas, why would anybody have bothered to record the use of indoor antennas at all?

A. Good question, I don't know.

Q. With respect to the last sentence of paragraph 39, what is the purpose of presenting a hypothetical that involves forcing all viewers in the Chicago area to rely solely on indoor antennas, I mean is that attempting to suggest that that's some sort of real-world possibility or what?

A. I think all we were trying to do is just to demonstrate, if you change the parameters, how does the—what's the change in population or households.

* * * *

[195] Q. This is the local electronics store you told us about earlier?

A. Uh-huh.

Q. First was that person the person who suggested to you that the splitter should go between the A/B switch and the VCR?

A. I'm sorry?

Q. Well, let me back up a second. Do you see in the diagram, between the A/B switch and the VCR, there's a square that has the label PS?

A. Power splitter.

Q. Power splitter. Right. Was this person the one who suggested to you that the power splitter should go between the A/B switch and the VCR?

A. I guess so, yes.

Q. Were you aware, when he suggested to you or at any time prior to yesterday, that the [196] effect of placing that power splitter there would be to cause every set in the house to be limited to viewing the same cable program at the same time?

A. Yes.

Q. And were you aware that, if you moved the power splitter in front of the converter, it would allow other sets in the household to view different cable programs?

A. If you had more converters.

Q. Or if you didn't need converters, correct?

A. You mean going into a cable-ready television?

Q. Yes.

A. Okay. That's an opinion.

Q. How many homes are you aware of that go to the trouble of having coaxial cable running after the A/B switch to other sets so that everybody can watch the same show at the same time?

A. In truth I don't know how many households are like that. And in truth I think that one of the reports we read said that there were something like 27 configurations. We chose [197] one that seemed to be reasonable based on what people were suggesting. You know, you draw another diagram and we'll be happy to discuss that too.

Q. I'm trying to explore whether this diagram is typical. And I'm suggesting to you that, if you have multiple TV sets in a house and they all want to be able to watch cable, that the typical home would not all want to watch the same cable show on multiple sets, they would want to watch different cable shows on multiple sets. Would you disagree with that?

MR. ISSENBERG: And he's answered that that couldn't be done given this diagram—

MR. LOCKWOOD: No, he said you could move the splitter.

MR. ISSENBERG: That's right, you could move the splitter. But given that diagram, it couldn't be done that way.

MR. LOCKWOOD: I'm asking him whether this diagram is typical. Typical means most people or the majority of people would set up their system this way, putting the splitter in the place he put it.

MR. ISSENBERG: If you define typical [198] that way, okay.

BY MR. LOCKWOOD:

Q. Listening to your counsel here, could you tell me what you meant by the term typical in this report on this paragraph and this diagram?

A. We felt that this is a typical setup, I mean we had no reason to argue with it.

Q. By typical what do you mean, do you mean that a lot of people would use it?

A. We walked into the store, asked how you set up things, and that's what they told us.

Q. Did you ask this guy whether in his experience, whoever he is, this setup was the typical setup?

A. It was one of those that he had recommended.

Q. To whom?

A. To me, a consumer, not an engineer.

Q. You have cable?

A. I have cable, I don't have this problem.

Q. Do you have more than one set in your home?

A. Yes.

Q. How many sets do you have?

[199] A. Two that are cable-ready.

Q. So, on your two sets, you get to look at different cable programs at the same time, right?

A. Sure.

Q. Do you know any circumstances that you can think of apart from what this gentleman told you, whoever he is, as to why somebody would want to set up a home TV system with multiple TV sets so that everybody would have to watch the same cable program at the same time?

A. Okay. What I think we're trying to do is we walked in, asked the fellow about some configurations, this is the one he had told us about. In this case we were acting as a consumer, not as electronic engineers. This does not make sense, you know, from an engineering viewpoint and maybe it doesn't even make sense from an operational viewpoint, but this is certainly what we were told is typical.

* * * *

[203] Q. Okay. And you don't know whether—

A. But I still have to tell it is the signal coming in cable or is the signal coming in over the air, because the channeling is different.

Q. I understand that. For openers you're telling me you don't know whether TV receivers come with built-in A/B switches? I'm not saying all of them, I'm saying any of them today?

A. I guess I don't know the answer to that one.

Q. Now, you say you've got an A/B switch and it's not built into your—

A. No, I don't have an A/B switch. But any cable-ready television has to be told whether it's the channeling plan for cable or channeling plan for over the air.

Q. I understand that. But, if you don't have an A/B switch, that means, if I understand [204] you correctly, that you're getting all your television through the cable; is that correct?

A. Okay. An A/B switch means there are two input ports and one output port, right? Okay. I mean that's what a switch is. Internally on the television all I have to do—cable-ready television, you tell it that RF input, is it following the cable channeling plan or is it following the over-the-air channeling plan.

And that's all you've got to know, there's no A/B switch built into the receiver to select between over the air and cable. All you're doing is telling it which of the two channeling plans is being selected.

Q. This is the tuning more that you're talking about?

A. Yes, that's right.

Q. The purpose of an A/B switch in this diagram is to obtain a signal from an antenna; is that right?

A. That's right.

Q. So are you personally obtaining an off-the-air signal from an antenna that's hooked up to an A/B switch on your system?

[205] A. No.

Q. So it follows from that, does it not, that you don't have the perceived need personally to receive signals off the air because there's some channel you want to watch that's not carried on your cable system; is that correct?

A. Right.

Q. So the need for an A/B switch to hook up to an antenna for somebody on cable is determined by whether or not that person wishes to receive off the air some TV broadcast station not carried on cable; isn't that correct?

A. Yes.

Q. Okay. Now, that TV station not carried on cable that you wish to watch can either be a VHF station, a UHF station, or both, correct?

A. Or either.

Q. Or both?

A. How can it be both?

Q. You can have two TV stations not carried, one of which you want to watch, one which is UHF, one which is VHF, right?

A. Correct.

Q. Now, if you have both a VHF station and a UHF station—let me back up. [206] If you have only a UHF station that's not carried and you have a converter, you would not use an external A/B switch for a TV receiver that has both a VHF and a UHF input, right?

A. That's correct.

Q. If you have only a VHF station not carried that you wished to watch, you would use an A/B switch because your cable converter input is the VHF input on your receiver, correct?

A. That's right.

Q. And having a VCR between the A/B switch and the TV receiver doesn't add ot the complexity of this system, does it?

A. No.

Q. And you show remote 2 and remote 3 in this diagram. Are you aware you can purchase a universal remote that would have just one remote that would operate those two?

A. I'm not very familiar with the universal remote so I guess I can't answer that.

Q. You heard testimony yesterday from Mr. Stern on that subject?

A. I did, but I thought universal remote means that I could train it to run a TV receiver or train it to run a VCR, for example, but I'm [207] not sure about the process of being able to train it to run both of them.

Q. You just don't know?

A. I don't know—I don't have one and I've never tried to run one.

MR. ISSENBERG: Off the record for a moment.

(Recess)

MR. LOCKWOOD: Back on the record.

BY MR. LOCKWOOD:

Q. Directing your attention to paragraph 44, in the second sentence, is that a typographical error when you say the TV set has a 70 ohm coaxial cable?

A. That could be 72, 75, yes, it's probably a typo, yes.

Q. Isn't it normally 75 ohm, I mean isn't that the standard?

A. It's probably 72 is the actual.

Q. Going back to your cable set earlier, I don't remember, did you say you use some sort of a switch to go from cable to some other mode?

A. Yeah.

Q. What mode are you switching from and to?

[208] A. Well, you have to tell the system whether you are—whether the RF port coming in is connected to a cable plan or an over-the-air channeling plan. They're different.

Q. But, once you've told it that, if you don't have an antenna, you just leave it there, right?

A. Yeah, it just assumes you're going to be forever connected to a—

Q. Yeah, to the cable?

A. Or the over the air.

Q. The RF VHF port?

A. Yeah.

Q. But you make that switch once and you never switch it again, right?

A. Right.

Q. You say at the bottom of page 22, the last sentence, that the cable/normal switch is on the backside of

the receiver and can only be operated manually on older TV sets. Is the location on the backside and can only be operated manually, do they both apply only to older TV sets?

A. In truth, trying to do a little short investigation of this, we found both, we found [209] some that had them on the back, some of them on the front, you drop down the front plate, and you can switch there. The modern ones have a menu that would come up, you know, on the remote control that says cable or antenna so you can do it from a chair.

Q. From the remote?

A. From the remote. And all that's doing is switching the interior. This is a cable—all these are cable-ready receivers. And all you're doing is telling it, you know, either to watch the cable channeling plan or the over-the-air channeling plan.

Q. It's basically an instruction to the tuner, is it not?

A. That's right.

Q. You don't have any statistical data on the number of sets out there in the world as to which you can operate the tuning mode switch by remote versus the front of the set versus the back of the set; is that true?

A. We tried to do that, we went to some of the bookstores and got their—you know, their available literature on systems equipment that's available. And it sort of listed features, but [210] we couldn't find these types of numbers. And that would just tell us about the various model numbers, how many of the various models did they list that would have those characteristics. And we wouldn't be able to tell how many of those are out in service right now.

MR. LOCKWOOD: Off the record.

(Discussion off the record.)

MR. LOCKWOOD: Back on the record.

BY MR. LOCKWOOD:

Q. With respect to the quote from the NTCA report in paragraph 45 about 27 separate diagrams, do you have any knowledge or information as to the extent to which those 27 diagrams sort of are needed to be used in the real world; in other words, are there some fewer than 27 diagrams that describe most of the installations?

A. I think your statement is probably true, that fewer than 27 describe most situations, but I don't know the statistics on that, I don't know—I wouldn't know how to get that.

Q. In paragraph 27 you make the point that indoor antennas are not usable in many geographic [211] locations and that, therefore, you would need a second set of cables running from each additional TV set to an external antenna. In that type of a situation, the same phenomenon would occur for somebody who was not on cable at all; isn't that true? In other words, if you had multiple TV sets in your house and you wanted to watch off-the-air TV and you couldn't use an indoor antenna because of the location of your home, you would have to have multiple cables running to your external antenna; isn't that right?

A. That's right, sure.

Q. So the fact that you were on cable hasn't worsened your situation any as far as that's concerned?

A. That's right.

Q. Now, in the third sentence, just for clarification, you say other alternatives include connecting the in-home cable as in figure A. Is that supposed to be figure 10?

A. Yes.

Q. You talk about cabling additional TV sets separately for the cable system in this paragraph. Do you know whether or not it was common for people who are on cable who have [212] multiple sets to have multiple cable hookups as opposed to the situation that you show in your figure 10, where you simply have one initial drop

and then all the sets connect to that cable through another coaxial cable that's inside the house?

A. I'm sorry, I lost the transitions in your question.

Q. Yeah, it's not a very good question. Paragraph 47, one of the things you're talking about is a system whereby each TV set would be hooked up to cable through a separate coaxial cable leading to the cable drop, correct?

A. Right.

Q. As opposed to your figure 10, where they're all hooked up to a single cable drop, in effect, as shown in that diagram, right?

A. Yes.

Q. Do you have any knowledge as to the present frequency of cable subscribers who have more than one TV set of having, in fact, this separate cable hookup for each set that you've referred to in paragraph 47? By frequency I mean whether it's common, rare, whatever.

A. I have knowledge that people have [213] setups like that. The frequency of occurrence I don't have any knowledge of.

Q. Do you have any awareness that one of the changes made in the '92 cable act was to reduce the price that cable system operators could charge for multiple hookups within a single home?

A. Yes.

Q. Turning to paragraph 50, you list 11 steps that you say might be required to change from a cable channel to a broadcast channel. Do you see that?

A. Uh-huh.

Q. With respect to your typical system reflected in figure 10, are steps A, B, and C required?

A. In the case of changing from a cable channel to a broadcast channel, if that broadcast channel is VHF, those steps would be required.

Q. What does remote 1 do in your diagram?

A. Remote 1 selects—the cable set top converter has all the channels available to it off the cable drop. It has

either a channel 3 or a channel 4 output. So the remote 1 selects among those available channels that are coming in [214] on the cable drop.

Q. If you have a—well, first, if you have a cable-ready set with an internal A/B switch, you don't need steps A, B, and C, do you, because you can control that from a remote?

A. Yeah, I think that's right.

Q. With respect to steps D, E, and F, looking at your diagram and assuming that the only over-the-air stations you wish to view are UHF, couldn't you avoid steps D, E, and F by simply leaving the tuner mode switch on normal at all times?

A. I'm not sure, I'd have to think about that.

Q. Well, if you've got a UHF input and you want to watch a UHF station that's not carried on the system and it's attached to an outdoor antenna, the tuning mode for that system would be the normal TV system, right?

A. Uh-huh.

Q. Your cable is coming through channel 3 if you've got a converter which is also normal, right?

A. That's right.

Q. You tune the cable through the [215] converter, not through your television tuner, right?

A. Uh-huh.

Q. Therefore, doesn't it follow from that that you would never need to switch from the normal tuning mode to the cable tuning mode if you've got a converter and you're picking up your UHF channels separately through the UHF input?

A. I'm wondering if that's not a typo in that, it almost seems like this step is necessary whenever the desired channel is VHF.

Q. Isn't it true that the cable frequencies for VHF and the over-the-air frequencies for VHF are pretty much the same?

A. Oh, that's right, that's right.

Q. So you really wouldn't need it for VHF?

A. Not for the VHF.

Q. Right. Basically the only time this would be used would be when you had a single coaxial lead into your TV set rather than a UHF and a VHF port; isn't that right?

A. Yeah. I guess even I'm confused about the sequence of steps here required to get this set up right.

Q. If you have a cable-ready set, that's [216] the kind of set that generally has a single coaxial input; isn't that right?

A. That's right. And for sure it's true, then you would have to walk over to the television, if it's got a manual switch, a switch between cable and the antenna.

Q. On the other hand, if the cable-ready TV set with the single coaxial lead had a built-in A/B switch that was operable from a remote, you wouldn't have to do that, would you?

A. It's not a really a switch and you keep saying that, because a switch switches between two RF ports. What you're doing from the remote is just telling the tuner now to switch between, you know, one channeling plan or another channeling plan. An A/B switch implies two input ports and one output port.

Q. Have you ever heard the expression tuning mode switch?

A. No.

Q. When you walk over to the set and do what you described before in your report and orally and change something from one—from cable mode to normal mode, in laymen's terminology can't that be characterized as a [217] switch?

A. But it's not an A/B switch.

Q. I didn't say it was an A/B switch.

A. Yes, you did.

Q. I said that was a switch.

A. I think earlier you said there's an internal A/B switch, and there's not.

Q. I'm sorry, I believe I may have misspoken. If you've got a single coaxial lead in a modern cable-ready set and you have a station you need to get over the air, you have the antenna and the cable coming in to the back of the A/B switch and a single lead coming out, right?

A. That's right.

Q. And you then on your TV set, if you wish to view the over-the-air UHF signal that's coming in through there, you have to change the tuning mode?

A. That's right.

Q. Is it your understanding that that tuner mode change on modern cable sets can only be done manually?

A. On modern ones?

[218] Q. Right.

A. No. I think the modern more expensive ones certainly are done by remote control.

Q. Indeed didn't you describe for us your set earlier that had a cable and a normal button on it?

A. But I have to do that on the receiver, I can't do it remote control. But the ones we had looked at at this electronics shop, the upper end receivers, this switching of the tuner is done by remote control, you're right.

Q. Now, with respect to I through K, whether or not you need to do that depends entirely on the over-the-air signal that you get through your antenna, doesn't it?

A. That's for sure, yes.

Q. And, for example, let's assume that you had a single UHF TV station that was dropped from the system that you wanted to watch. Okay.

A. I'm sorry, a single UHF?

Q. A single UHF station that was dropped from the system.

A. Okay.

Q. If you went out and purchased at that point an antenna so that you could view that [219] station, you would purchase, if you knew what you were doing, a UHF only antenna, right?

A. Uh-huh.

Q. And you would direct that UHF only antenna—you would get a directed antenna and direct it into the direction from which that UHF station was transmitting, correct?

A. Uh-huh.

Q. Under those circumstances how frequently do you think it would be necessary to get up, see how the picture looks, jiggle around, adjust the antenna, and walk back to the chair?

A. I am also assuming, when you say that, that we're talking about an outdoor UHF antenna.

Q. Correct.

A. It probably would not be that necessary to go through those steps.

Q. With respect to these various steps that you say might require the following sequence, is this essentially the worst case description of what somebody might have to do to view an over-the-air picture on a cable system?

A. A worst case? I can't describe it as a worst case.

Q. Well, are there any scenarios that [220] you've been able to dream up that involve more steps than you've enumerated in paragraph 50?

A. I'm sure that we could think of some even worse than this.

Q. But you haven't gotten around to it yet?

A. No.

Q. With respect to steps I through K again, those steps as we said earlier are entirely a function of the particular circumstances involving the particular station that you're looking at; isn't that right?

A. Yeah. I think, for example, if it were a UHF antenna say sitting on top of the television, if you ever operated one of those, you realize that people moving in the room or the placement of things can cause that signal to change. And so, you know, step I could be necessary —I guess the three steps could necessary if you were

using an indoor antenna. That's kind of the consequence of this.

Q. But, in terms of describing for someone the percentage of homes that would have to go through steps I through K, you have no empirical data to tell us how much that would be; isn't [221] that right?

A. That's correct. It's certainly not uncommon, because those of us who had to use rotors to pick up signals, this was—you know, each time you selected a different channel over the air, there was some change in the antenna to improve the signal, that was required. In the case you gave as listening to only one over-the-air channel and then setting up the antenna to maximize on that, you're right about that. You probably would eliminate those steps.

Q. Well, in fact, isn't it true that cable essentially improves the position of someone wanting to watch over-the-air TV from what would be the case without cable as far as the necessity of going through steps I through K are concerned?

A. Absolutely.

Q. And the next-door neighbor that doesn't have cable may very well have to do steps I through K repeatedly for all over-the-air stations, not just whichever one or two might be dropped from the cable system; isn't that right?

A. Absolutely.

Q. Now, you at the end of this say most of [222] the typical installations will involve a similar amount of operational complexity. Most means more than 50 percent?

A. Yes.

Q. What's your basis for saying more than 50 percent of cable subscribers, given what we've just talked about in terms of the various situations that arise, whether you have cable-ready sets, whether you have UHF only stations you want to watch, whether you have the need or not the need to fine tune, what's your basis for saying

more than 50 percent are going to require steps A through K or a similar amount of complexity?

A. There's no empirical data that I have that can show that, it's just visiting the home of my daughter, for example, or my mother, friends, people that don't have the latest technology which is the—you know, having a cable-ready television. They're going through steps like this. And I think there's a large population that's still out there. Most—you know, I'm not—like I say there's no empirical data set, just observation.

Q. With all due respect, you haven't [223] observed a majority of the TV households in the United States personally, have you?

A. No. no.

Q. So how are you extrapolating from whatever limited number of personal observations you may have made to most which implies as I read it at least most of the people in the country?

A. That one way or the other there's a series of steps that one has to go through to set up a change between over-the-air reception versus a cable pickup.

Q. And those are of equal complexity to steps A through K?

A. I think what we said is a similar amount of operational complexity, it doesn't say equal.

Q. Well, define for me in that context what you envisage as the difference between similar and equal?

A. That there would be a set of these steps that would be—one would have to go through a series of these steps in almost every situation.

Q. Well, would it be a similar amount of complexity if all you had to do was get up and [224] change the tuning mode switch or change the tuning mode?

A. Yes, it's a similar amount.

Q. Even though you did not have to change the A/B switch and you didn't have to fiddle with the picture?

A. I guess what I'm saying is the easiest example is to sit at the couch, sit there with my remote control,

change one switch that switches me to a new channel, and I'm set up. That's sort of my baseline reference.

Q. Now, you mentioned about going to your daughter and friends' and stuff like that. Have you seen people, in fact, performing these steps?

A. Yes.

Q. Did they seem to be doing it successfully?

A. Yes.

Q. Did you interrogate them to find out how much difficulty they had in learning how to do it successfully?

A. No.

Q. Do you have any information for us as to the number of people that would either be unable or unwilling to perform this full sequence [225] of steps if it was necessary to see a channel that they wanted to see?

A. No.

Q. In paragraph 52 which is I guess sort of a conclusion type paragraph, you say, thus, a genuine and substantial consumer inconvenience is caused if local channels are not available on cable. Is the genuine and substantial consumer inconvenience that you're referring to there the performance of some or all of steps A through K in paragraph 50?

A. Yeah, that's the intent.

Q. So essentially what it boils down to is getting up out of your chair and going over to the TV set and flicking some switches or fiddling with the dial or something like that; is that right?

A. Yes.

Q. In paragraph 53, in the third sentence, though this problem would be minimized if A/B switches were built into receivers, converters, and VCR's, A/B switches are currently mainly stand-alone manually operated components. What's your basis for saying that they are currently mainly stand-alone manually operated components?

[226] A. I'm trying to think where we got that information. I think it was just we had contacted some of

the cable companies in Boulder—or the cable company in Boulder, asked them what were being used, talking to the electronics store. It sounds like, if people have an A/B switch, that it is a stand-alone device.

Q. Are you aware that you can buy, for example, a remote controlled A/B switch?

A. Uh-huh.

Q. So, when you say stand-alone, you don't mean to imply that it's manually operated, you just mean it's external to the television set, correct?

A. Right, uh-huh.

Q. You say in the next sentence radiation from improperly installed A/B switches can cause interference to nearby TV sets especially in the form of severe ghosting to broadcast VHF TV channels. What knowledge do you have as to the extent of which that problem actually exists in the real world today?

A. As a matter of fact, that's one of the things that the FAA and the National Cable TV [227] Association looked into. When they were looking at the radiation from the cable systems, this is exactly the problem they were worried about, was that somebody would improperly hook up their cable TV system to their outdoor antenna and now start radiating the cable channels. And, of course, that became a good source of interference to the FAA. And certainly this was investigated. And again it got to the point where they just said they needed to be able to make external monitoring to determine how much this is happening. And we at the time just investigated the possibility of it. But offhand I don't know what the—you know, how often this happens. But I know that the FAA and the cable people were very concerned about this.

Q. Well, what would happen to a person who hooked his cable system to his antenna in the way you just described, what kind of a cable picture would he receive on his set?

A. You know, if he's done it properly, if he's connected the type F connector directly into the antenna terminals and has done nothing to connect it to his TV, he shouldn't see anything at all on his television.

[228] Q. And that would tend to indicate to him, would it not, that he had made an improper installation?

A. Yes.

Q. That would tend to get him to call his cable company or a handyman or a friend and say what have I done wrong here, I'm not getting a cable picture, right?

A. That's right.

Q. And, at some point in the process, unless he decided that he somehow or another was prevented by God from subscribing to cable, he would solve this problem, right?

A. Yes.

Q. And at that point he would not be having severe ghosting to broadcast VHF TV signals, right?

A. Yeah. Another example of that is the FAA and cable were also worried that people would say I don't really need this A/B switch with my second television, all I need to do is splice the down lead from the antenna plus the cable together and then run it into my television set. Now you have a perfect example of the guy can receive a signal on his TV set, but he's also [229] radiating like mad.

Q. If he splices his cable to his coaxial cable from his converter let's say to his antenna transmission down lead, what kind of a picture does he get when he tries to watch cable at that point?

A. He could still get a very good signal.

Q. How would he watch, for example, a cable picture that was transmitted by UHF under those circumstances?

A. The same way. He would switch to the UHF channel. And now, because of the UHF essentially terminals—I mean the antenna is effectively hooked to the television at that point. Because he's spliced both the cable and the antenna down lead together, he could conceivably get a good signal on both cable and the antenna and he's bypassed the A/B switch.

Q. Are you aware of what, if any, frequency this particular phenomenon you've just described is actually occurring in the real world?

A. No. Again it was just a concern by the FAA and the cable association that things like this could happen. They were trying to figure [230] out ways to monitor it.

Q. When did they have that concern?

A. It probably started when they redid the channeling plan for cable. As you said—

Q. When was that?

A. As you said the VHF over the air and VHF cable is the same. But then they translated the UHF down into the FAA band. And it was probably about that point that they had the concern for all of this.

Q. And just for the record what date was that?

A. I don't know, I would have to look that up. I don't know.

Q. Mid eighties, late eighties, early eighties? Could you give me any approximation even if you might not give me a precise date?

A. When did the cable-ready television start to become available? Probably about the same time period, I don't know, I don't know.

Q. In any event are you aware of any data produced by the FCC, the FAA, or anybody else that indicates that in 1992 let's say radiation from improperly installed A/B switches was, in fact, causing interference to a significant [231] number of nearby TV sets?

A. No.

Q. In paragraph 54 you refer to the performance of an A/B switch being critical, especially with respect to switch isolation which needs to be 80 to 90 dB. Isn't it true that the FCC has actually put out requirements that require A/B switch isolation to be at least 80 dB?

A. That goes back to the FAA requirements, yeah.
Q. And that was done in approximately 1987?
A. It was? I don't know.
Q. I'm asking if you know.
A. No, I don't know.
Q. In any event you don't have any reason to believe, do you, that inadequate isolation of A/B switches is a problem that exists today in the real world, do you?
A. No.
Q. When you say the requirement for a high switch performance causes a limited lifetime for A/B switches, could you tell me what you mean by a limited lifetime? [232] A. No, I can't give you a definite number right now.
Q. Well, to what extent does this sentence that you've got in your report intended by you to indicate that this limited lifetime for A/B switches creates some sort of material problem for persons wishing to watch over-the-air television who are subscribers to cable systems?
A. It probably doesn't to the person watching cable. The problem is trying to maintain the 80 to 90 dB of isolation. That says that the signal on one port can't be more than one to ten to the minus ninth on the other port. That's the leakage. If one were to maintain that 80 to 90 dB of isolation, you probably need to replace these switches periodically. I don't know what the lifetime of them are, to maintain that number. That would be something that the FCC would almost have to mandate, but they don't.
Q. Well, if it costs let's say $7 for a new A/B switch and you have to replace it every five years, do you regard that as a material item of expense for a consumer?
A. No.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of LINDA McLAUGHLIN taken on behalf of the Defendant held at the offices of U.S. Department of Justice, Federal Programs Branch, 901 E Street, N.W., Washington, D.C., commencing at 9:25 a.m., Monday, May 8, 1995, before Deborah C. D. Shumaker, Notary Public.

* * * *

[252] Q: I think I understand.
A: —or even the potential for doing it because all of the networks don't give the cable systems the same minute, the same actual minute like one minute after the hour.
Q: After the hour, yes.
A: Third is that the, both the system for selling the audience and the fact that many products are interested in reaching all homes and not simply cable homes puts cable operators at a disadvantage if they are reaching 60 percent of the homes, and then finally, that cable operators aren't inserting ads on all of the networks that they have. Although the last one is less important because after about 10 you are not going to pick up very much in the way of share.
Q: And why is that? Why after 10 would you not pick up that much in the way of share?
A: Because about 90 percent, maybe even more, of the share attributed to all cable networks as a group is attributed to about 10 of the rated networks.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of TOM MEEK, held at the offices of Willkie, Farr & Gallagher, 1155 21st Street, N.W. Washington, D.C., commencing at 9:40 a.m., Monday, May 8, 1995, before Doreen M. Dotzler, Notary Public.

* * * *

[168] Q: Page 34, how about KBCI, the Boise, Idaho station?

A: That's correct.

Q: It appears according to your drop report that it was dropped by three Shilo Inns and one Jones system; is that right?

A: That's correct.

Q: And the Jones system is 198 miles away, is that right?

A: That's correct.

Q: And it appears on the form as being local; is that right?

A: That's correct.

[169] Q: What's your understanding as to why a station 198 miles away would be local?

A: Well, there are a number of possibilities there. You could have a station that is being brought in by microwave which is often the case out in the west a considerable distance and where it would still be local for copyright purposes.

It's possible that there is carriage of a translator that is owned by that station in that area that would be reflected, and this report is carriage of the main station.

Q: That microwave situation, that is fairly common out there in the western ADIs, is that right?

A: It occurs. As to how common it is, I don't know.

Q: Just so it is clear for the record and so it is clear for me, the broadcast stations signal is relayed essentially by some sort of microwave device at some distance from the station itself; is that right?

A: That's correct.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of TOM MEEK, held at the offices of Wilkie, Farr & Gallagher, 1155 21st Street, N.W., Washington, D.C., commencing at 9:36 a.m., Tuesday, May 9, 1995, before Raymond G. Brynteson and Doreen M. Dotzler, Notary Public.

* * * *

[394] Q: In your report, you do an analysis on a quarterly basis of new sign-ons, is that correct?

A: It is a quarterly basis, actually, of the total number of stations on-air which would reflect both new sign-ons and stations going dark.

Q: At the bottom of page 16 you report that the first quarter of '90 saw the first reported drop in the number of commercial stations, as measured on a quarterly basis, beginning from 1985, is that right?

A: That's correct.

Q: Is there any other quarterly period, according to your data, in which there was a drop in the number of commercial stations operating between 1985 and 1992?

A: No.

Q: So when you say the first, it is, in fact, the only, is that correct?

A: That is correct.

* * * *

[395] Q: Well, do you remember what the reported drop, you know, the total amount of stations for that January 1990 quarter was as compared to December 1989?

A: Yes. Two. That's what it was reported as.

Q: That's on Attachment D, minus two, is that right?

A: That's correct.

Q: And that is out of how many total commercial stations for that year?

A: At April of 1990 it was reported as 1,090.

Q: On a percentage basis de minimis, right?

A: Yes.

Q: Less than, I don't know, I don't have a calculator, but less than—

A: It would be less than 1 percent, and I am sure it would be well under 1 percent.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of ROGER G. NOLL taken on behalf of the Plaintiff held at the offices of Willkie, Farr & Gallagher, 1155 21st Street, N.W., Washington, D.C., commencing at 9:05 a.m., Wednesday, May 10, 1995, before Deborah C. D. Shumaker, Notary Public.

* * * *

[17] Q: Now, how do you explain your conclusion that cable operators who account for about 1 billion dollars of annual ad expenditures are going to knock out local stations with about 18 billion dollars of ad revenues per year?

A: I didn't say they would knock out local stations.

Q: What did you say?

A: What I said is that at the margin that there will be weaker stations, UHF independent stations in particular who will, some of whom will be made financially unviable, others of whom will be made weaker financially and will curtail their [18] programming. I didn't say anything about the industry in general which is the way you posed the question.

Q: What percentage of the stations would you say are weaker within the meaning of your last answer?

A: My expectation would be on the order of 25, 30 percent of the stations that are UHF independents would be significantly affected by being dropped. It could be more; it could be less, but that's a reasonable ballpark estimate.

Q: You said 25 percent would be significantly affected by being dropped, but what percentage of the stations would be dropped?

A: No. That's what I meant. Those would be the ones that would be dropped.

* * * *

[21] Q: Now, what makes you think that the number in the future will be higher?

A: There's two reasons for it to believe. First of all, the politics of "must-carry" would be different if the Supreme Court were to uphold the decision that this was a First Amendment violation, then there would be no credible threat in the future that there could be cable regulation, and, hence, there would be less concern on the part of the cable industry with political reprisal if it dropped extensive numbers of stations, and so to the extent that the dropping of stations was inhibited in the past by the efforts of NCTA to restrain it, then it would be greater the second time around.

And the second reason of course is that advertising has grown so great in cable as an absolute number that it was basically a much less significant part of the business calculus of the cable firm in the '85 to '92 period than it would be in, say in the year 2000, so that for those two reasons I think the incentives to drop stations have increased, and the—and if the decision is upheld, the political and legal constraints against [22] it have been reduced, so I would expect more of it to happen.

Q: Now, you say to the extent that dropping in the past was restrained by fear of reprisals, that would disappear. What extent did that factor play a role?

A: Well, I mean, we don't know for sure. All we know is that the NCTA put forth a considerable amount of effort to, first of all, ascertain the dropped plans of cable systems and, secondly, to make public statements and to write to individuals who run cable systems and ask them to restrain themselves. Now, it may well be that it had no effect, but it strikes me as plausible that indeed

it might have had some effect, especially among the largest MSOs who are much more visible and, therefore, politically vulnerable.

Q: You aren't aware of any studies or data which shows whether or not there was such a factor, are you?

A: I think it is in principle not possible to undertake that kind of a study because we didn't have two parallel universes, one in which there was an attempt by the NCTA to restrict the [23] dropping and one in which it wasn't, so that's why I answered the way I did, that I thought that a perfectly reasonable lower bound estimate to what the effect would be would be on the order of 25 to 30 percent of the independents, but there is a good reason to believe it might be more.

Q: Well, you say "a good reason". It is purely a theoretical argument, is it not?

A: I think it's more than purely theoretical because there is evidence that the attempt was made. There is no way in principle to measure its effect statistically, but it is certainly more than a theoretical statement that the NCTA did in fact try to dissuade cable systems from dropping stations.

Q: But you don't know whether it had any effect?

A: Absolutely, and it could be that the NCTA was wasting its members' money by putting forth all that effort to try to stop it. It seems to me implausible that the cable systems would have not fired them wholesale if they were doing all that activity, but of course, it is possible.

* * * *

[35] Q: You know of no study that says that cable's main competitors for very small local advertising are over-the-air independent stations rather than newspapers? You are reaching that conclusion by analogy?

[36] A: That's correct. Based on the nature of the product.

Q: Assuming that independents are cable's main ad competitors for very small local audiences. Are you really

suggesting that without "must-carry" cable operators will drive the independent stations out of business?

A: Not all of them. Of course not.

Q: Just these 25 to 30 percent marginal stations?

A: I didn't say that it would even drive 30 percent out of business. I said it would substantially reduce the audience and change the nature of the programming or drive out of business that fraction.

Q: What portion do you think it might drive out of business?

A: I don't know. It's very hard to figure out what the answer to that is because of the absence of detailed financial information that is reliable about television station operations.

Q: What is your best guess? Let's not take a guess.

A: I wouldn't want to guess.

[37] Q: What's your best professional estimate?

A: I don't have—I mean, that would be silly for me to guess. I'm not going to do it. I don't have an estimate.

Q: Now, isn't it true that an independent station has a small audience but a large geographic reach while a cable system has a smaller geographic reach?

A: A single cable system may have a very small reach. It may be very large depending on which cable system it is.

Q: But in general, isn't it usually the case that the TV station has a larger reach?

A: The vast—

MR. GILLIGAN: Object to the form. Go ahead.

A: The vast majority of cable systems are relatively small compared to the over-the-air broadcasting stations.

* * * *

[46] Q: So you are saying that the likelihood of this effect is dependent on two factors, and what I am asking you is in some, what is the likelihood of those two factors causing that effect?

A: Well, I think the likelihood of it happening in the local advertising market is greater than it is in the na-

tional market. It seems to me that it's going to be a significant period of time before the national over-the-air networks are sufficiently so weakened that you can imagine cable getting a dominant market share there, but in terms of the local market, it's very possible that they could get a dominant share in that market by dropping the independent stations, the UHF independent stations.

* * * *

[54] Q: Now, is there any reason a broadcaster couldn't offer a cable operator the same deal?

A: No, there is absolutely no reason why a broadcaster couldn't offer the same deal. Of course. You could have markets for which broadcasters have to buy time on cable, and cable would be able to extract monopoly returns from that since it has basically a monopoly on access to more than half of the viewers, and so in most television markets a cable systems could not only charge monopoly prices to subscribers, it could charge monopoly prices to over-the-air broadcasters.

* * * *

[60] Q: What types of stations do you predict will be dropped?

A: Those that have the lowest audience ratings combined with the absence of a specific target audience that would have its subscription to cable television systems contingent on carrying that station. In other words, audience rating is a good indicator, but it is not sufficient by itself.

Q: Is the economic incentive to drop or reposition a station the same regardless of the type of station?

A: That's just what I said. It depends to some degree on the type of station and the degree of the intensity of the demand for its viewers for it so that one might find, for example, a very low rated religious station that might get carried because there was an intense demand for it on the part of some subscribers, so that audience [61] rating alone is not the sole predictor, but it is a good first order approximation.

Q: After audience rating what other predictors are there?

A: Well, they would be things that would be indicators of a subscription effect from carrying that station. I mean, once again, historically the motive for carrying stations locally was that you had to carry local stations in order for cable to succeed, and initially it was a signal improvement technology, not a programming enhancement technology.

Q: Would you—all other things being equal, would you expect advertiser-supported stations to be dropped first?

A: I would expect that the likelihood of dropping advertiser-supported stations is a little higher than the likelihood of dropping noncommercial stations, but I don't think it would be huge. There would be a slight enhancement incentive for dropping the UHF independent over the noncommercial, but it wouldn't be huge.

Q: That's because of your theory that one of the incentives to drop is the fact that the [62] cable operators is a competitor?

A: That's right.

Q: Now, when you say the difference in the incentive would not be huge, is there some way you can quantify what the order of magnitude would be?

A: Well, there's two effects of dropping a station. One would be the audience effect and the other would be the advertising competition effect, and if you drop a noncommercial station, it still redistributes its audience, and so the issue then would be the relative importance of those two effects, and my guess is that low-rated noncommercial stations would be as likely to be dropped as low-rated UHF independents or almost as likely simply because there is no positive incentive for the cable system to carry them, and there is some positive incentive to substitute a cable network, especially one owned by the cable system for it, or you can just let it go dark.

Q: Why would there be an incentive to let it go dark?

A: Well, it may well be that the incremental profits of the system are zero no [63] matter what is carried because at the margin for systems, particularly systems with high capacity, the issue is not ESPN versus a UHF independent or a noncommercial station. The issue is of very low-rated cable network versus a low-rated over-the-air television station, and it is conceivable that there would be simply no incentive if the system is already carrying all its own networks. There would be no incentive to pick up a low-rated cable network owned by somebody else.

Q: When you say a substantial number would be dropped, is this the 25 to 30 percent you were talking about earlier?

A: Yeah. That's the lower bound. That would be basically the future would mirror the past.

Q: When you say "would mirror the past", have you analyzed the behavior of cable operators between '86 and '92 with respect to what they dropped?

A: Yes. I mean, insofar as I reviewed the discovery documents from the systems and from NCTA.

Q: What kind of broadcast stations were [64] chosen to be dropped?

A: Well, a lot of them were stations that had very low audience ratings. Some of them were duplicate networks, but the 25 to 30 percent number is actually stations that satisfy the local criterion in Stan Besen's expert report.

* * * *

[78] Q: In the second line of paragraph 26 you say that the evidence supports the view that cable systems will drop some stations. Would the health of the broadcast industry be threatened if some stations were dropped or denied carriage within the meaning of that sentence?

A: The health of the individual stations that were dropped would be threatened. Obviously the health of the stations that weren't dropped would not be threatened.

Q: How about the health of the industry as a whole?

A: I don't even understand what that concept means. I mean, I know what you are citing. You are essentially citing the words that Justice Kennedy put in his report, and I have no idea what that sentence means. It seems to me that if there's three UHF independents in a city and one [79] is dropped and two aren't, the two that aren't dropped benefit; the one that is dropped is harmed, and I don't understand how to add that up to be health of the industry.

Q: That is a concept on which you as an economist feel you have nothing to add?

MR. GILLIGAN: Objection to the form.

A: The only thing I have to add is I think it is not a sensible way to characterize what the nature of the problem is, that I do not believe that over-the-air broadcasting is going to disappear because of the absence of "must-carry". If that's what the sentence is meant to imply, then indeed the health of the industry isn't threatened, but it is the case that the health of some significant number of both UHF independent and noncommercial outlets is in fact threatened by the end of "must-carry".

* * * *

[142] Q: If subscribers value the program broadcast by a station, is it your position that the cable system will lose no revenue by dropping it holding everything else constant?

A: It depends on the station. The survey results that I have cited elsewhere here indicate that for things like the third noncommercial outlet or a weak UHF independent in terms of total audience, people will say they regretted having been dropped, but they wouldn't make their decision on the basis of it.

* * * *

[156] Q: Would the economic viability of the broadcast industry be destroyed if cable operators dropped duplicative unrated and distant stations?

MR. GILLIGAN: I object to the form of the question.

A: I do not believe that "must-carry" in the current environment is properly characterized as something that has to do with the viability of the entire industry. I think it has something to do with the viability of specific stations.

Q: This 25 to 30 percent of the UHF stations that you were talking about?

A: UHF independent stations, plus some of the noncommercial stations.

* * * *

[158] A: They are competitors for viewers, and since advertising revenues are proportional to viewers, they reduce advertising to the extent, revenues to the extent they siphon viewers.

Q: But they don't carry ads themselves? I mean, you wouldn't drop one of those stations in order to capture their advertising?

A: No, but you might very well drop them in order to capture their viewers to increase your advertising rates.

Q: If they were viewed by very few people, it wouldn't do much for your advertising rates, would it?

A: Again, the issue is not how many people they are viewed by. It is what happens to them and how many people are viewing the options to which they switch, and, once again, we are back to the area of specialization. If you produce a specialized cable network in which you own the advertising to substitute for a specialized UHF independent, then you can benefit even if the [159] audience ratings of both are asterisks. In other words, if you put a cable-owned shopping system on to substitute for a local UHF independent that does shopping, you can have a substantial spillover benefit even though as a fraction of total revenues of the entire system it's tiny.

Q: What is the effect on competition as opposed to on a competitor if that happens?

A: Well, if the effect is to reduce the number of channels that are offering a particular category such as homeshopping channels, for example, then presumably the price of the products over and over offered over the homeshopping channel could go up, or, likewise, if people have preferences over the different channels, then it could be the case that some of the viewers of the canceled homeshopping channel would switch to yours but others would either turn the set off or switch to network television, and so there would be a loss of consumer benefit for the people who weren't allowed to get their first choice.

[162] A: And I don't remember what it is.

Q: Now, in some cases there is no consumer or government reaction after a drop; is that correct?

A: That's correct.

Q: Isn't it fair to assume that in those situations subscribers either are neutral or pleased by the shift?

A: No.

Q: Why not?

A: Because again, you are dealing with the relatively small numbers here, and all that you are observing is that the people who watch that particular station were unable to act collectively to form a pressure group to represent their interest.

Q: Were unable to act collectively or [163] chose not to act individually?

A: A lot of things happen to people that cause them not to write a letter to the editor or make a phone call to a city councilman. The fact that they failed to act doesn't mean that they regard it indifferently.

Q: All other things being equal, it is more of a suggestion of being indifferent than when they do write a letter, I assume.

A: Well, that's the basic story of why collective action takes place is that it has to pass some threshold of interest. We are back to the same old story. It would

be much more costly to try to drop a network affiliate than it would be to drop a low-rated UHF independent station.

Q: Now, on page 17, paragraph 25 you say, "But for the most part cable systems do no face a significant financial incentive to keep on local stations other than network affiliates and the primary PBS affiliate. Cable's market power derives from the fact that over-the-air broadcasting is not a close substitute for the full range of multichannel video it is provided by cable, which gives cable operators the power to [164] exclude competitive channels (including local television stations) to their own benefit."

How many network affiliates and public stations and independents combined do cable stations, cable systems typically carry?

A: It depends on how many there are in the local market.

Q: Shapiro says six on average. Do you accept that number?

A: Sure. Why not? I mean, I don't think the average is particularly interesting. I have no idea why anybody would calculate the average.

Q: Do you know how many local stations are typically available?

A: Weighted by people, it's more than six but unweighted by areas, that's roughly right.

Q: Shapiro says typically seven.

A: That may be right.

Q: Now, when you say network, I think you have already told us that you include Fox. Do you include the new Warner Brothers and Paramount networks?

MR. GILLIGAN: For the record, the Witness has pretty consistently distinguished [165] between the three major and other minor networks.

MS. KATZ: He did testify on the record that Fox is considered to be one of the major networks. That's four.

MR. GILLIGAN: Well, let's let the Witness speak for himself.

MR. JOFFE: Right.

A: I would—the sentence should have included the strongest VHF independents as well. I would say that I don't know obviously whether UPN is sufficiently popular and important, that it has generated sufficient audience following the dropping of it to be problematic, but I would agree, you wouldn't drop Fox and you would not drop strong—I mean, obviously if WTBS is going to be carried in San Francisco, I am sure it is going to be carried in Atlanta, so in the final report that will include the strong independents as well, and that will sort of moot your question because the people that Fox and UPN pick off as their affiliates are the strongest independents.

* * * *

[178] Q: On page 20, paragraph 30 you say, Cable systems no longer need local channels to achieve high penetration."

Do you really believe that if cable systems dropped all of the local stations they would not see a significant erosion in their penetration or the prices they could charge to subscribers?

A: No. I believe that they need the ones that I referred to before, that what I—that should be all of the channels. It shouldn't be they can drop them all. You are right. That is misleading the way it is written.

Q: It really should be—

MR. GILLIGAN: Unintentionally so.

Q: It really should be cable systems no longer need 25 percent of the local UHF local [179] channels?

A: Yes. Do not need to carry all local channels, yes. That's what it should be.

* * * *

[182] Q: In other words, this is sort of predictive based on incentives. You are not saying in fact what has happened is more extensive than is desirable?

A: This is a conceptual framework about how we interpret the data about carriage and about drops.

Q: You are not saying that you have resolved the competition diversity debate?

A: No, I am saying that we do know that there is an incentive to substitute cable for over-the-air broadcasting to a greater degree than is optimal.

Q: If that incentive in fact takes place, then there would be a non-optimal result?

A: We know the incentive is there, and the issue, the only issue that would cause the real world to depart from the prediction would be if cable television systems are not profit maximizing. They are instead run by philosopher kings.

[183] Q: They have some other incentives?

A: Right. They are trying to do good.

MR. GILLIGAN: Do you include John Malone in the category of philosopher Kings?

A. Yes. John is a good guy.

Q: We will take whatever endorsements we can get.

MR. GILLIGAN: Or Ted Turner's.

Q: When you say that cable systems offer too little access to over-the-air stations, is this undersupply small or large?

A: It's the 25 percent of UHF independent channels in the 15 percent of noncommercial stations.

* * * *

[221] Q: So it is fair to say that "must-carry" is more important the more unpopular the station is?

[222] A: The less popular it is, yes. The smaller the audience rating, number one, and, number two, the smaller the size of the area in the way it obtains that rating, then the more vulnerable it is.

* * * *

[257] Q: In your experience, is it common or in [258] your observation of the industry is it common for a cable operator to intentionally leave open channel capacity for a significant period of time?

A: No, it's not typically. They expand capacity on an as-needed basis since the only thing is that they have to add it in discrete lumps and so they don't always fill it up instantaneously when they add capacity. But if they are being rational, they add capacity in proportion to their financial incentive to do so.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of RICHARD FELDMAN, held at the offices of Willkie Farr & Gallagher, 1155 21st Street, N.W., Washington, D.C., commencing at 10:35 a.m., Thursday, May 11, 1995, before Doreen M. Dotzler, Notary Public.

* * * *

[44] Q: If a cable system fails to file one of the copyright forms that we have been discussing, do you know how Larson treats that in his data?

A: I believe he counts that as non-carriage for that period.

Q: If I understand it right, with certain specifications which you worked out with Larson, you essentially had him dump the data which fit those specifications on a disk and turn it over to you?

A: Yes.

Q: Did you have to pay him for that?

A. I presume that APTS paid him for that or somebody paid him for that.

Q: Somebody other than you?

A: Yes. I didn't see a bill and I don't actually know the price that he charged for that.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEPOSITION OF: JOHN HARING, a witness, called for examination by counsel for the Plaintiffs, pursuant to notice of counsel, held at the offices of Willkie, Farr, Gallagher, 1155 21st Street, N.W., Washington, D.C. at 9:30 a.m. on Friday, May 12, 1995, before Thomas R. McPhail, CSR, Notary Public when were present on behalf of the parties:

* * * *

[25] Q: Did you look at advertising revenue for local broadcast stations?

A: I believe I have seen statistics on aggregate of advertising for local broadcast stations.

Q: Any advertising revenue on a station-by-station basis?

A: I don't think so.

Q: Now, I take it as an economist one of your areas of expertise is the analysis of the effects of regulation on consumer welfare; is that correct?

A: Yes, that is correct.

Q: And do you have an opinion as to whether the must-carry regulations increase consumer welfare, as you sit here today?

A: Yes, I do.

Q: And what is that?

A: I believe the must-carry rules do—well, I believe they increase the economic welfare of some consumers.

Q: Which consumers are those?

[26] A: Consumers as a group who do not subscribe to cable.

Q: And what about the effect on consumers who do subscribe to cable?

A: I think they have a small impact on the welfare of such consumers.

Q: Is that a positive impact?

A: I wouldn't go so far as to say whether it was positive or negative.

Q: So if I understand your answers you say that it increases the welfare of consumers who do not subscribe to cable, but you are unable to say whether it increases or decreases the welfare of consumers who do subscribe to cable?

MR. ENNIS: Objection.

BY MR. LANDIS:

Q: You may answer.

A: We speak often roughly in terms of consumer welfare, that is the welfare of consumers as a group, and that involves making interpersonal utility comparisons, which economists are, I won't say loathed to make,

* * * *

[29] Q: And I understood you to say that generally cable operators try to maximize the value of their menu of programs to their subscribers. Correct?

A: Yes.

Q: And is it fair to say that to the extent that the must-carry rules force them to make decisions other than those that they would make in the absence of must-carry, that the effect would be to decrease the value of the menu to their subscribers?

A: I think that is a fair statement.

* * * *

[32] Q: Before you knew what the objectives of Congress were, off the record a minute.

(off the record discussion).

Q: Did you have an opinion as to the desirability of the must-carry?

A: I hadn't thought about it.

Q: When was the first time you ever thought about must-carry?

A: When I was a member of the staff of the Federal Communications Commission.

Q: And when would that have been?

A: I was there from '84 through 90/91.

Q: And what was your view about must-carry at that time?

A: I had no view about must-carry, per se.

Q: You were neither in favor or opposed to it?

A: I think to the extent that I had a view about must-carry, it was related to the issue of cable market power, and I think I probably, to [33] the extent that I thought about it at all, thought that must-carry was a kind of second order form of regulation, and that the primary problem was the problem of cable monopoly power. And my interest as a staff member would have been more focused on that fundamental problem rather than the second order fixes, if you will.

In other words to the extent to which you perceive the problem to be a part of function of cable monopoly power, you can cope with the problem, take the problem of cable monopoly power as a given and cope with it by various regulatory fixes.

Alternatively, you can undertake policy changes that try to remedy the fundamental problem, and see what you need to do to cope given you have dealt with the fundamental problem.

So, for example, in OPP, DBS was often a topic of conversation, I think it must have been something in the asbestos in the walls; but OPP for a very long time, the office of Plans and [34] Policy in the FCC had been an office that saw great promise in DBS, think we lost a lot of credibility because of the time that passed before DBS materialized. It was always just around the corner.

We also were very much interested in telephone company entry into cable supply. But those were the kinds of

issues we were thinking about that I think are related to must-carry. Must-carry was something that, we read news reports about. And at one point we were asked by Congress, the FCC was asked by Congress to examine the impact in terms of the carriage study that is involved in this case. But it was not something that our office was particularly involved with.

So the short answer to your question is, never really thought much about must-carry.

Q: Did you view it at the time as a second order solution to what you described as the monopoly problem?

A: Well, I am saying now, as I think back [35] about it, I think the view, to the extent that I had a view, which I don't think I had, was that it was of a class of regulatory fixes that dealt with symptoms rather than causes, and that we were more concerned with causes. So I don't think I had much thought about it or its characteristics, or its effects.

Q: Have you attempted to quantify how much the increase in the consumer welfare of non-subscribers would be, or is from must-carry?

A: No.

Q: I believe you testified that the, you thought the effect on cable subscribers was small, is there a similar characterization you can apply to the effect on non-subscribers?

A: Well, I think you could make the statement that the effect on non-subscribers is likely to grow as time passes.

Q: Other than the trend, can you describe its current magnitude?

A: I would think my view is that we have more or less always had must-carry, that to the extent [36] to which we have not had must-carry, the behavior of cable systems has been conditioned by the possibility that must-carry would be reimposed. So I don't know that we have good evidence of what permanent lack of must-carry would mean, and that would change over time.

I would think the effects in the near term are small and will tend to grow. That is if we did not have must-carry.

Q: How would you go about trying to measure the effects on non-subscribers?

A: I don't think I would attempt to measure the effect of non-subscribers. I think the logic chain would be that the extent to which must-carry were to go by the board, and that there are incentives to substitute cable networks for local broadcast signals, that would lead to fall off in the quality of broadcasting, and an impact on non-subscribers. I would suspect that the magnitude of that impact would grow as the—to the extent, as and to the extent that the substitution occurred.

* * * *

[52] Q: If you could turn to Haring Exhibit 1, Dr. Haring, and look at paragraph 3 in the report. Do you see the first sentence of paragraph 3 there?

A: Yes.

Q: What do you mean by the phrase significant adverse impact in that sentence?

A: I mean that a significant number of broadcast statoons will lose audience.

Q: Do you have an estimate of the number of broadcast stations that will lose audience?

A: No.

Q: Do you have an estimate of the amount of audience that they will lose?

A: No.

Q: Do you have an estimate of the percent of audience that these stations would lose?

[53] A: I have, or am I aware of or—

Q: Either.

A: I do not. My colleage Jeffrey Rohlfs has undertaken to examine what the impact of loss of carriage had in terms of the viewership of staitons that were dropped during the earlier period.

Q: Is that work by Dr. Rohlfs the basis for the statement that there will be significant adverse impact?

A: It is confirmation of an expectation, yes.

Q: And is that the only estimate you have seen of the size of the impact?

A: Yes.

Q: Have you seen any estimate of the number of broadcast stations that would not be carried in the absence of must-carry?

A: No. I think you would have to put a time frame on that, and make a variety of assumptions about other factors. So I am not sure that I have seen any such analysis.

[54] Q: When you say put a time frame on it, I assume—I take it that you believe that the number of stations that would be dropped in the absence of must-carry is increasing over time?

A: When you say an estimate, as you did in your last question, the reason I pause is that it implies sort of a snapshot, if we did this there would be this, and it seems to me we have a set of relationships that are evolving through time. As they evolve, what I have testified to is I believe the incentives for substitution of cable networks for over-the-air sta[illegible]s will increase, so it would be hard to say an estimate o[illegible] what that is, it is an evolving picture of what will happen.

Q: Well, do you have an estimate of how many stations would be dropped or not carried in each of the next five years if the must-carry rules were not in effect?

A: No.

Q: Have you seen any such estimate?

A: No.

[55] Q: Do you have any bounds that you can put on the numbers?

A: Yes, I would say that if we had what was perceived to be a permanent or quasi permanent removal of the must-carry requirement, that there will be a—the number of drops will exceed zero. So I can bound on the

bottom by saying it will not be zero. I mean I hesitate to start picking numbers, they would be speculative. I would think there are a significant number of stations that would be dropped. By significant I mean more than zero and—I have no estimate that says there will be X many drops on day 15 after the quasi permanent must-carry requirement meets its demise.

Q: Do you consider the number of stations that were dropped during the non must-carry period to have been significant?

A: Yes.

Q: In relation to that number of drops do you have any way to quantify what you think the number of drops to be in the next five years in [56] the absence of must-carry?

A: I think it is very difficult to make such predictions in part because of the, as I said, the circumstances evolved through time. Amongst the circumstances that evolve are capacity. So how absolutely scarce the slots would be is a function of what capacity additions are in part. So it is hard, I think, to relate what would happen in the future to what happen in the past.

So I don't think I would want to say that because 6,000 stations were dropped, or so many stations didn't receive carriage in the past that what would happen at some point in the future, how it would correspond to what happened in the past.

I do think the economic incentives are such that, and the way the world is evolving is such that the number, I would anticipate that there would be a growing number of drops.

* * * *

[59] Q: Do you have an opinion whether in the absence of a must-carry requirement broadcast television would be in jeopardy?

A: Yes.

Q: What is that opinion?
A: That it will be in jeopardy.
Q: And by broadcast television did you understand to mean the entire broadcast television industry as opposed to particular [60] stations?
A: I mean particular stations.
Q: Do you have an opinion as to the industry as a whole?
A: I think the there is a significant nonnegative probability that over-the-air television broadcasting could eventually be replaced by other modes of transmission.
Q: Is there such a significant nonnegative probability, even with the continuation of the must-carry rules?
A: Yes.
Q: I take it you think that probability is higher in the absence of must-carry rules however?
A: Faster, yes.
Q: Are you able to quantify the difference in any way?
A: No.

* * * *

[294] Q: All right. The possibility that a cable operator might drop broadcast stations to drive them out of business and increase their power in the market for the delivery of video programming, do you see that as significant risk based on your expert judgment of market conditions as they prevail today?
A: I believe there are market circumstances where that is a possibility. I would not assign it a high probability.
Q: Okay. The risk of dropping broadcast signals in order to gain power in the local advertising market, do you view that as presenting significant competitive concerns?
A: Same answer.
[295] Q: Not a high probability?
A: Yes.

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of CHARLES L. JACKSON, Ph.D, held at the offices of Wilkie, Farr & Gallagher, 1155 21st Street N.W. Washington, D.C., commencing at 9:21 a.m., Friday, May 12, 1993, before Pamela Jane Utter, Registered Professional Reporter and Notary Public.

* * * *

[30] A. * * * Similarly, telephone companies provided transport of video signals for companies, for customers such as the broadcast networks, point to point links for customers. The FCC rules later codified in the cable act, the '84 Cable Act prohibited telephone companies from offering cable service to consumers in their own service area. Consequently, there was very limited direct competition between the two firms.
Q: Have you previously offered an expert opinion—I don't mean simply by way of testimony or consulting arrangement, but I would include in that also scholarly papers published, speeches you've given; things where you've held yourself as having expertise concerning cable channel capacity?
A: Not that I recall.
Q: How about concerning the growth of communications technology?
A: Yes.

* * * *

[53] A: * * * So, I look at the environment we are in today and I see great uncertainty, competitive threats. I believe that if the cable industry stands still they lose the opportunity to exploit new ways of serving people such as the Internet access. How that will pan out, I

don't know, but it's certainly an area where they appear to have a technology leg up and where demand is changing rapidly and it's very uncertain.

And if they stand still they could easily be eclipsed by the systems built by the phone companies, by the upgrades and improvements to the satellite system, and it seems to me that that would put much of their investment at risk.

So I guess my answer to your question is that I think that cable industries do need to take the environment into account as they consider upgrading.

* * * *

[119] Q: * * *

What I'm more directly getting at is you have a picture of a world in which there is 60 to 70 analog channels and some, I assume, larger, amount of digital channel capacity. Do you have any opinion about what types of services would be carried in the digital bandwidth and what's in the analog?

A: I have an opinion but I have to give that same caveat I've been giving here, that it's not a consequence of specific study in this issue.

[120] It seems to me that what will—it's a question of when that mix is carried on digital it will change over time. And if you look at the far out future, you know, 15, 20 years, then the analog signals may go away and it will be all digital, or it may be that analog is used for second TVs, old TVs in the house and everything that's on analog is also duplicated on digital.

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UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

MEMORANDUM OF CABLE PROGRAMMER PLAINTIFFS TURNER BROADCASTING SYSTEM, INC., ET AL., IN SUPPORT OF THEIR MOTION FOR SUMMARY JUDGMENT

* * * *

May 26, 1995

NEWSPAPER
ELECTRONIC
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CABLE TAKES FRESH ANGLE ON SERVICES

By Wayne Walley and Lindsey Kelly
Electronic Media staff

DALLAS—Cable operators said here at the National Cable Television Association convention last week that the industry is slowly shaking off its malaise—but what's behind their better mood isn't necessarily good news for programmers.

John Malone, president and chief executive officer of TCI, summed up the issue when he said the focus in the cable industry right now isn't programming, but the regulation-lite computer industry.

"The government has stayed out. That industry is not legislated and has been left as free enterprise," Mr. Malone said during his closing-session interview with Larry King at the NCTA convention.

Others think that even with looser regulation, the number of cable channels may be approaching its limit.

As was apparent at the convention, which was attended by more than 25,000 people, Mr. Malone's sentiments rang true. The cable-television industry is widely turning its attention to other business such as telephony, interactive TV and on-line computer services instead of traditional TV programming.

For example, on the convention floor, Microsoft had little trouble drawing crowds, while programers and some

equipment manufacturers resorted to games, celebrities and giveaways to get foot traffic.

More telling still, several programers trying to launch new services were completely and conspicuously absent from the convention floor, where a record mob of 361 exhibitors covered 301,000 square feet.

At least 100 new networks have talked about plans to launch between now and the end of 1996, but most of them were less visible at this year's convention.

"You have to have a sober business plan and not be overzealous. Today you have to be prepared to hunker down," said Nickolas Rhodes, senior vice president of business development for the Cox Communications-Times Mirror joint venture CTM Networks, which set up a booth promoting its new Outdoor Life and Speedvision networks.

Some of the other networks that were present took a cue from the cable industry's shift in interest. Discovery Networks decided to put its resources and efforts behind the launch of a new online service on the Internet.

Greg Moyer, president and chief operating officer of Discovery Networks, said he now believes the four niche services it once touted might never launch as traditional 24-hour services because of the channel paradigm.

"People have wanted to talk to us about file servers and programs on demand," Mr. Moyer said.

"We have the new networks in development, but they could be a subset for particular interests. We'll use the extra time to assess the delivery and maybe come out with more innovative things."

Josh Sapan, president and chief operating officer of Rainbow Programing Services, said his company has also shifted gears and will initially create a singles' network for computers before trying to turn it into a cable TV programing service.

Although the "going forward" rules have helped some already-launched networks significantly expand distribu-

tion, detractors say they have shifted developing new networks.

NCTA QUOTES

"We're looking for something that's more neutral that isn't rude and crude."

—Jim English, Playboy Networks Worldwide president, about naming a new adult movie pay-per-view channel.

"Celebrities work. There's a lot of surfers watching TV, and seeing a celebrity will stop them."

—Gerald Hogan, Home Shopping Network chief executive officer.

"I think we're going back to Lenny Bruce."

—Robert Kreek, Comedy Central chief executive, president and CEO, Comedy Central, on the future of "funny."

"Take a rapist to lunch."

—Court TV chief executive Steven Brill, who said it was a jokingly-proposed slogan for the channel. The audience buzzed disapproval.

"MCI doesn't bother me. Rupert scares me to death. And he's my partner in some things."—John Malone, president and CEO of TCI., responding to a question about MCI's $2 billion investment in Rupert Murdoch's News Corp.

"If you want to talk about a level playing field, why not let TCI and Time Warner buy CBS? Why not let them compete at that level? I think TCI should be able to own TV stations in every market they serve. . . . ."

—J. Patrick Michaels, CEO of brokerage firm Communications-Equity Associates.

"Cable is where the action is. It's like a water system that not only carries water, but scotch, bourbon and port."

—Glenn Jones, chairman of Jones International

"The regulations have changed the face of television economics," said Brad Siegel, president of Turner Network Television and Turner Classic Movies.

"Advertising revenues are out of the equation for new services, and the burden is on the consumer. That's a complete reversal. At what point will advertisers support a service as it moves on a new product tier?"

But that is only part of the picture. While cable viewership is increasing, operators are well aware that, with cable already in more than 60 percent of the available TV households, future growth in traditional cable services alone will reach a point of diminishing returns, particularly with the advent of direct broadcast satellite service (already proving to be formidable competitors) and the RBOCs (which are threatening to be).

According to statistics provided by Nationsbank Capital Markets, potential new revenue from the 40 percent of households that don't have cable is $15 billion.

That's hardly a figure to scoff at, but telephony—local and long-distance, and being alternative access providers for business customers—and data services have a current market value of $145 billion.

The multiple system operators already delivering telephony and cable in the United Kingdom have only had their appetites whetted for a slice of the even plumper domestic pie.

Brian Roberts, president of Comcast, says that its U.K. Cable Partners now has 150,000 cable subscribers and 125,000 cable-telephony and data-services customers. "In the U.K. we have more revenue from cable telephone and data services than we do from cable customers, even though there are more of them," said Mr. Roberts. "That's amazing."

Such vistas threaten to make cable programming less appealing. Some operators also don't believe the public wants more channels.

Movies-on-demand and pay-per-view sporting events have potential, certainly, but forget the left-handers' fly fishing channel, says Leo Hindery, managing general partner for MSO InterMedia Partners.

Video will take up only a fraction of the 500-channel universe, he predicts. The rest will likely be used for data transmission and telephony.

"Eighty video channels is about as many as the average consumer household can handle." Mr. Hindery said. "And running a network is getting to be so expensive that these narrow, esoteric channels are not going to be able to survive."

Kay Koplovitz, speaking at a session titled "Cable's Year in Review and Prognostications for the Future," called the 57 new cable networks announced in 1994 "stillborn," and said that the other sources of revenue competing with traditional programing for operator interest and marketing energy aren't improving the current environment for new services.

"Those of us waiting to launch new brands or new networks in the marketplace or those with . . . the ones in the test tube, it's still going to be a few years before they are going to see the light of day," Ms. Koplovitz said. But some, such as Roger Werner, president and CEO of Cox/Times Mirror Management Services Co. and the Outdoor Life and Speedvision networks, still see opportunity.

"The last year has had a chilling effect on folks," Werner said. "The environment is very difficult. But you have to be out today to be around to enjoy the hospitable market in two or three years. The danger in not doing what we're doing is to not do it.

"Time Warner, Viacom, Capital Cities/ABC or somebody will move to fill the voids," he said. #

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of HARRY SHOOSHAN, III, held at the offices of Mintz, Levin, Cohen, Ferris, Glousky and Popeo, 701 Pennsylvania Avenue, N.W., Washington, D.C., at 9:30 A.M. on Monday, May 15, 1995, before THOMAS R. McPHAIL, CSR, Notary Public when were present on behalf of the parties:

* * * *

[77] Q: Do you believe that the 1992 must-carry rules are necessary to protect the health of the broadcasting industry as a whole.

* * * *

[78] A: As you can imagine I find that a difficult question to answer yes or no, so let me try to respond to it directly.

I believe that today the stronger broadcasters, those that are affiliated with three major networks and with Fox, increasingly perhaps some of the new networks like United Paramount or Warner although less so with those.

Let's just take the universe of the Fox ABC, NBC, and CBS affiliates don't need must-carry protection. Witness the fact they opted for re-transmission consent with varying degrees of consent were able to negotiate a deal for carriage with cable operators.

However for stations that were not as strong, that were marginal, must-carry has clearly been, it seems to me a plus. I mean I believe that no broadcaster enters the marketplace saying that it is always going to be the weakest broadcaster. No broadcaster enters the marketplace saying I am [79] only going to do program length

commercials for the next 20 years; they all aspire to be like the, say stronger stations, the network affiliates.

And I think that what Congress did in 1992 was to say we are going to provide in effect a regulatory safety net for those stations.

So do you need must-carry to support the health of the broadcasting industry as whole today, no. But you do in terms of a safety net for a lot of broadcasters who aren't, who don't have the established relationship with viewers for example that the network affiliates have.

I also believe that over time the universe of stations that may need to fall back on must-carry as that safety net, is going to grow. Because I think that over time, while the erosion has been slow, it has been steady; that cable networks are going to continue to grow in popularity and as they continue to grow in popularity they will, that is take viewers away from broadcast stations, they will take advertisers away from broadcast stations. And that over time probably some stations that are network affiliates today, may find themselves unable to get carriage. [80] Absent something like must-carry.

So at that point, you know, I think if we see cable continue to grow as it is growing, and I think for the most part that growth has been good, it has added benefits and competition. That we will see an erosion of the underpinnings of free over-the-air broadcasting.

And Congress in 1992, having that in mind, seeing that moving picture of the future, I think, put a regime in place that was certainly reasonable. And one that I certainly can't disagree with at this point.

[80] Q: As to who needs must-carry now, would you agree with the statement that it is mainly marginal independents?

A: I don't, when you use the term marginal independents I would say that it would be the stations that are not affiliated with the primary broadcast networks.

* * * *

[163] Q: Would you be willing to say that at this point there are more cable programming services than there are cable channels on the average cable system?

A: I think that is true now; I think it was true in the absence of must-carry and I think it is likely to be true well into the future.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of DAVID J. LARGE, held at the offices of the U.S. Department of Justice, Federal Programs Branch, 901 E Street, N.W., Washington, D.C., commencing at 9:35 a.m., Tuesday, May 16, 1995, before Josett F. Hall, Registered Professional Reporter and Notary Public.

* * * *

[28] Q: Did any of the switches have instructions that were more detailed than simply providing a diagram?

A: Some of them contained diagrams showing how to use the switch for different purposes, for instance, switching between a video disc player and a VCR.

Usually there was one diagram showing how to hook it up for cable and off-air reception.

Q: In your opinion, were the instructions provided easy to understand for a layperson?

A: I felt they were.

[29] Q: A little further down in that paragraph, the next sentence actually, you say, "Normal installation takes a few minutes and consists of the following steps," and you go through the steps.

First let me ask you, is what you describe as a normal installation the installation that you have diagrammed on page 4 in figure 3?

A: Yes.

Q: In the list of—this list of steps, was it taken from one of these packages or did you draft this yourself?

A: I drafted that. It was simply a statement of what you would do to follow the diagram on on the package, but that's my list.

Q: If you were giving instructions to a consumer who was installing an A/B switch, would you recommend that they unplug the components of the system from the—when I say "unplug," I mean unplug the electrical power cords.

A: I think it has become standard practice to do that on all electronic equipment. It has to do with too many lawyers in the world.

Q: Touche.

[30] What is your basis for saying that this is normal installation?

A: Oh, normal in the sense that from our experience most subscribers do a simple, you know, series connection of VCR, television—or television set, VCR and converter and that in our experience most of those television sets now have a single coaxial input.

Most antenna leads are a single combined antenna lead and based upon that the normal installation is to take this lead, this lead and this lead and hook them up (indicating).

Q: When you say most installations follow this example, do you know how many in terms of a number or a percentage?

A: Just in, you know, my 15 years of operating cable systems I've seen the evolution in what's happened in down leads and what's happened in television sets and VCRs and I've found, you know, recently that this is, you know, the trend, is the way it's going.

And when we went out to stores and we looked to see what was on shelves now, we found in fact every single case this is the way TV sets [31] and VCRs were configured.

Q: So the normal installation that you have described here assumes a cable-ready television?

A: No, not necessarily.

Q: Does it assume—

A: Whether they're cable-ready or not, they may have a coaxial input.

"Cable-ready" is a misnomer that we have finally defined it in the rules or we're in the process of defining it in the rules. But "cable-ready" as it has been used colloquially generally means that it's a television set that has an extended tuning range that tunes both the cable channels and the off-air channels.

So the type of antenna connections is independent of that.

Q: And you say that you have just gone through the process of defining this in a more technical or universal sense?

A: We're in the process of it. It's an ongoing rule-making.

* * * *

[39] A: In my experience the most common way that VCRs and television sets are connected is that the VCR output is connected to the input of the television set, and therefore any external input is made to the input to the VCR.

Q: Are VCRs similar to televisions in that there are different types of inputs for the VCR?

A: There are different types of inputs, albeit it I think there's a smaller percentage of VCRs that have separate inputs than television sets do.

Q: Would a VCR in any case have just one input?

A: Not in every case.

Q: But in some cases it might?

A: Oh, yes.

Q: And in other cases it might have separate coaxial inputs for UHF and VHF?

A: Or a coaxial input for VHF and a 300 ohm for UHF. I haven't done any study of, you [40] know, what the historical development is of the antenna terminals of VCRs.

Q: In the NCTA report at page 10, in the paragraph beginning in the middle of the page, the report states that most cable hookups involving VCRs and converters require the use of one or more input selector devices and

signaling splitters as well as extra converters and jumper cables.

Q: Would you agree with that statement?

A: No, I would not.

Q: Would you say that that statment was true in 1986 when made?

A: No, I would not.

Q: Why do you disagree with that statement?

A: Well, because in my experience as a cable operator I found that the vast majority of subscribers prefers a simple series connection of converter, VCR and television set. If I had to put a percentage on it, I would say that covers 75-80 percent of our installations.

In the few cases that people want a more elaborate connection, then usually it 's a simple bypass switch around the converter. And you [41] know, there is a minority of people who want a much more flexible switching arrangement, in which case you end up with extra splitters and switches or some sort of integrated switching device which is now readily available.

We recommended, if you read the interconnection committee report, we recommended a particular configuration of an integrated switching arrangement which provided very flexible switching, and that has since been produced and is available commercially.

Q: When was this latter recommendation published?

A: Well,it's when the interconnect commitee's work was published. It's in my list of publications, but it had to be around the time period of '87 or so.

That was published internally within the NCTA. The NCTA produced it. It was published in CED magazine. And it was incorporated in the FCC's report to Congress in fact that they did as part of the Cable Act.

* * * *

[60] Q: And would you expect that those types of switches would have the isolation required for an A/B switch?

A: As I've said, I have not researched those. I don't have an opinion.

Q: Back on page 7 at the beginning of the bottom paragraph, you state, "There are many small variations in installation of A/B switches."

When you say "many small variations," are you referring to something other than the 19 installation scenarios and these more elaborate television configurations on page 8?

A: In general, the 19 configurations were intended to accommodate those small variations, whether it was 75 or 300 ohm or whether there was separate V and U or one V and U and so on.

Q: In the NCTA report on page 10, the NCTA states that there are—at the bottom of the top paragraph they state that there were 27 different ways of connecting cable converters, television sets and VCRs.

Do you know whether these incorporate your 19?

[61] A:No. I was the chair of the subcommittee that produced the 27 diagrams, so I'm very familiar with them.

The issue we were addressing there had primarily not to do with selection between off-air and cable. It had primarily to do with the problem that's addressed in the '94 Cable Act, or '92 Cable Act, which is selecting independent choice of viewing and recording among multiple cable channels when a converter is used.

So those diagrams primarily dealt with interconnecting a converter, a VCR and a television set to obtain as much freedom as possible.

I'll further say that although there were—there were 27 diagrams there for the sake of completeness. Again, though, I come back to in my experience that in the vast majority of cases the people that hooked up the converter box, a VCR and a television set in simple series connection were quite happy with it; and the ones that didn't, generally a simple bypass switch around the converter took care of the problem.

As to the more elaborate diagrams, when you get to the end of that report, it [62] recommends the sort of integrated switching box that I drew in 3-D. And although I don't have statistics in the industry, I know that certainly our system put those out for subscribers who wanted a more elaborate switching thing because it was much simpler than, you know, a bunch of A/B switches and splitters.

MR. ISSENBERG: Could you read back the very first part of his answer, please.

(The record was read as requested.)

MR. ISSENBERG: That's fine. Thank you.

BY MR. ISSENBERG:

Q: When you say independent viewing and recording of separate cable programs, are you referring to two programs that are both on cable then?

A: That's correct.

Q: So this is different than the problem of recording—

A: Right. Although the integrated switching box also provided for selection between antenna and cable. It was sort of a one-size-fits-all configuration that solves both [63] problems.

Q: On page 8 in the last sentence above the Ease of Use Heading, you state that installation of A/B switches for those subscribers who need them is not unduly complex.

What is your basis for saying that it's not unduly complex?

A: Well, out of—we installed a lot of these for subscribers. We assisted a lot of subscribers in installing them. In my years of experience as a cable operator we have found, you know, that subscribers seemed to have very little problem.

Q: And by "unduly complex" then you mean that subscribers are able to do this without difficulty?

A: That's correct. There is other evidence of that in the Corpus Christi situation where, you know, we looked at the public press reports of that, which were that some 50,000 switches were sentt out to subscribers.

We have to presume that they successfully installed them because the viewership [64] of the off-air stations that weren't on the cable system didn't drop significantly. The stations were very happy about that.

Q: Do you know whether in Corpus Christi any of those viewers simply unhooked their cable hookup and simply hooked themselves back up to broadcast television alone?

A: Again, I'm going by the public press reports, but the press reports indicate that not only did off-air viewership not drop significantly, the cable system also reported that subscribership had not dropped significantly.

Q: That's different than the question I asked, though, which is not did they drop their subscribership but did they drop—did they unhook their cable hookup and hook in their broadast—

A: Oh, rather than installing the switch?

Q: Right.

A: I have no way of knowing. That would seem—I means, it would seem to me like a very hard way to do it, but . . .

Q: In the NCTA report at page 19 in footnote 12, the report states, "The fact that the [65] A/B switch has been incorrectly connected may not always be readily apparent to the subscriber, particularly if direct pickup of strong off-air signals through the subscriber's television input terminals produces a picture even when the external antenna is not properly attached."

Do you agree with that statement?

A: In the sense that there's the word "always" in there.

Q: Could you explain what you mean. I think I know, but could you explain it.

A: Well, there are—you know, there's a percentage of television receivers which are very poorly shielded, and

when those receivers are connected in a very strong field, that is, they're evry close to the television transmitters, even with no antenna connected to the receiver, you would get off-air programming.

On the other hand, you wouldn't get cable programming, and I think it's a rather small percentage of the cases that you would get an acceptable picture without an antenna connected.

So I think it's a very minor situation where you wouldn't know that you've hooked it up [66] right, I mean, there's no cable programming and only of a small percentage of cases would you have an antenna program.

Q: When you say "there's no cable programming," what if there were a proper connection between the cable drop and the A/B switch and the A/B switch cable output terminal and the television, but an improper connection for some reason between the television—

A: If it were connected in such a direction that in one direction the cable input were hooked to the television set and in the other position the cable were hooked to the antenna—

Q: And the latter connection were not—

A: Right.

Q: —complete for some reason?

A: —then you would have—if no converter was used —and again, that is a minority situation because most subscribers use converters—if there were no converter attached, then you would find that you had cable programming in one position and the off-air pickup in the other position.

[67] MR. HUFFMAN: To clarify, that's only in the areas where you're in the strong field?

THE WITNESS: That's only in the case where you have a poorly shielded television set and you happen to live in such a position that every off-air program you want to watch is strong enough to break through that shielding.

These may be situations like that, but they've got to be a pretty small number of situations. Lou might find one

or two stations which are strong enough to do that, but it would seem to me very unusual that you found all the stations would give you any kind of acceptable performance of that antenna.

So I think it's a very minimal situation, but yes, it could happen.

BY MR. ISSENBERG:

Q: What would happen if a viewer installed an A/B switch using an antenna which was not properly grounded?

A: If an antenna switch is hooked to an antenna that's not properly grounded, the risk is that in an electrical storm the antenna could be struck by lightning and that could travel down the [68] lead and damage the converter or the television set or whatever.

Q: Or the VCR?

A: Or the VCR, whatever is there.

Q: On page 14 of your report—

MR. HUFFMAN:: Can we go off the record for a second?

MR. ISSENBERG: Yes.

(Discussion off the record.)

BY MR. ISSENBERG:

On page 14 of your report just below the subheading Improper Installation, you state that there was a concern at some point that some subscribers would connect the wrong combination of cables and terminals, resulting in a direct connection of the cable signals to the subscriber's antenna in one switch position.

First, could you describe the connection that you mean there.

A: Yes. There are three terminals in the switch. There's a common terminal and two input terminals. If the—

Q: The common terminal being the output to the TV or the VCR?

[69] A: The output to the television set. If the common terminal rather than being connected to the television set is connected to either the antenna signal or the cable signal, then in one switch position there will be a connection between the cable and the antenna and in the other switch position one of the two inputs will be connected to the television set.

Q: And what would happen if the first situation occurred?

A: In one position of the switch there will be—in the position that connects the cable input and the antenna there is no signal to the television set.

And in the other switch position, depending on which way you hooked it up wrong, you would either have cable signals or off-air signals connected to the television set.

Q: And would there be signal radiation at that point?

A: In the position that the cable input is connected to the antenna, there is presumably some radiation. How much depends on the situation.

[70] If the converter is in use, then the only thing radiating is Channel 3 on the output of the converter.

If there is no converter, then how much radiation would depend on the antenna. If it's a UHF-only antenna, presumably very little. If it's a VHF antenna, then you could theoretically have radiation basically of the full cable spectrum.

Q: On page 19 of the NCTA report, just above the subheading C, would you review the paragraph where—from the middle where it says, "In some of these cases."

(Pause in the proceedings.)

A: Yes.

Q: Is that what they're referring to?

A: That is what they're referring to.

Q: And with regard to whether it would potentially threaten interference with other services, do you agree with that?

A: In the absolute sense, yes. However, one, most people use converters, and if there is a converter in use there is no potential interference because there's only channel 3.

[71] The converter output is on a channel that's never used over the air. They always do that so there's no interference from the radiation even if there is radiation.

In the broader sense there is a potential for interference. On the other hand, the FCC—which if there's an agency that's paranoid about signal leakage, it's the FCC—looked at this, looked at all these arguments and rejected that as being a very unlikely possibility because the subscriber who hooked the switch up wrong would notice that's something is wrong, and would fix it.

I can tell you as a cable operator we were required, are required, to monitor all of our systems every quarter and have done so for years and we very carefully look, as we are required to do on every single leak, at the cause of the leak and have found that improperly connected switches or worn-out switches or anything having to do with switches is so far down the list of causes that it's insignificant.

* * * *

[102] Turn to your report and turn to page 12, please.

Under the subheading November 1987 Report and Order, your report identifies two vialation levels, 80 dB through 216 megahertz and dB through 550 megahertz, with the addition of the 55 dB through 806 megahertz.

Are those the isolation requirements currently in force for antenna selector switches?

A: That is correct.

Q: And antenna selector switches are also A/B switches.

A: Right.

Q: Do you consider these standards to be efficient for use in cable television?

[103] A: I consider them, yes, and let me qualify that.

In general, it's a real-world answer and the real-world answer includes several things. One is the statistical, you know, probability of signal levels and the other is the fact that in order for a manufacturer to guarantee a certain level they typically have to exceed the levels.

So if you take the statistical range of signal levels, the statistical actual manufacturer's performance, I think you end up with switch isolation which is sufficient in the vast majority of cases.

Q: What happens, generally speaking, if isolation is inadequate?

A: If the isolation is inadequate what you get is it's not—well, it's a ghost if you have the same channel on both sides. If you don't have the same channel on both sides you get in essence two pictures, one much lighter than the other.

If they're locked together, they're a stationary picture. If they're not locked together, you get a sort of rolling effect. You [104] see a—usually what you see is a sort of horizontal and vertical line that drifts very slowly through the picture (indicating).

Q: Are there any other effects on the picture?

A: Not generally. If they are considerably different, then you can get diagonal lines through the picture. It depends how much different the frequencies are.

Q: On page 6 of your report you discuss the switches that you found in stock at the stores you visited and state that they were all clearly marked as high-isolation switches.

By "high-isolation" you mean switches that would meet the standards required by the FCC?

A: What I mean is that usually it was prominently labeled on the package. "This is a high-isolation switch"; whereas, they might have TV games switches, for instance, that were not labeled that.

And generally those that were labeled high-isolation switches I found also had the FCC-required label which says it's suitable for antenna selection switch use.

[105] Q: Did you test any of the switches to determine if they met the criteria?

A: No, I did not. The FCC I believe under that part of the law they use what's called a verification process.

As I understand it, the verification process is that manufacturers are required to do internal testing and submit the results to the Commission to prove that they meet the specifications.

Q: Would you expect the isolation actually given by the switches to deviate from that specified by the manufacturers?

A: I would expect—certainly there will be variation. There are manufacturing process variations.

My estimation is that the manufacturers in general will make very sure therefore that they on average exceed the numbers so that with normal manufacturing variation the least of them or statistically the least of them will meet the specs.

We went through this same analysis in [106] the IS-23 committee, which is the committee that ended up extending this out to 806 megahertz, and I spent a lot of time with the engineers from the television manufacturers and they in essence described the process by which they—you know, what percentage and how you test them and all this stuff, and my impression from them is that is what they do, make sure that a statistically insignificant number don't meet the test.

Q: Would you turn to attachment 5 to the NCTA report. It would be page 1 of that part of the report.

MR. LOCKWOOD: This is the A/B switch evaluation prepared by Cablesystems Engineering?

MR. ISSENBERG: That's right.

THE WITNESS: Evaluation of A/B switch.

BY MR. ISSENBERG:

Q: Would you review pages 1 through 6 of attachment 5 and anything else if you consider it necessary.

(Pause in the proceedings.)

A: Okay.

Q: By way of example, let's look at [107] page 3 where the performance measurements of the Stanton Model AB-100 are indicated.

First, are you familiar with this part of the report?

A: Well, I'm looking at the data sheet.

Q: Have you reviewed this before today?

A: No, I have not.

Q: The data sheet indicates that the manufacturing specification for the A/B isolation in 90 dB through 200 megahertz and 80 dB through 200 through 240 megahertz and 60 up to 900 megahertz. And then it indicates that the measurement of the two samples were 57 dB and 58 dB respectively.

Do you have any reason to question those measurements?

A: I don't have any reason to know if they're good or bad.

Q: Do you know have any idea why there would be that much deviation from the manufacturing specifications?

MR. LOCKWOOD: Well, for openers, if you don't know which megahertz they were measured at, you don't know which number to compare them [108] against since the dB isolation is different for different levels of megahertz.

Does this tell you somewhere what—are they saying that the megahertz made no difference?

Your question assumes something which I don't think is determinable from the face of this document. Except for the—unless you're talking about the RFI egress; and if so, you haven't asked Mr. Large about that.

THE WITNESS: I was looking to see if they said this is the minimum isolation. I don't see that it says anywhere.

MR. LOCKWOOD: Well, on page 1 it says that all of the A/B switches tested failed to meet the CD specification 90 dB for RFI egress.

THE WITNESS: That's egress, though.

MR. LOCKWOOD: I don't know if that's of any significance—

THE WITNESS: That's of no significance to this. We're talking about isolation here.

BY MR. ISSENBERG:

Q: Well, at the top of page 3 it states [109] Electrical Test Results 5-500 megahertz?

A: Right. So I would assume this is probably the minimum isolation in that range.

Q: The minimum isolation?

A: I would assume they tested it and wrote down the worst-case isolation. But I don't know that. I'm just —I'm hypothesizing that.

Q: And so at the low end of that 5 through 500 megahertz—

A: No, not at the low end of the 5 through 500. I suspect, you know, my guess if I were an engineer and I were saying where is this thing in the spec, I would measure across the full range and write down the minimum level of isolation, the worst point, in other words, of isolation, wherever that may be.

Q: I was going to ask a different question.

A: Sorry.

Q: Let me just address that first. If you were going to test these things to determine the actual isolation performance, would you test them at different points on the megahertz scale, so to speak?

[110] A: Certainly. Certainly.

Q: Now, in this 5 to 500 megahertz range, at the low end the manufacturing spec would be 90 dB and according to the FCC requirements 80 dB would be required; is that correct?

A: Right. Realize at this time there were no FCC requirements.

Q: Right. No. I understand that. And then at the higher end of that 5 to 500 megahertz range it would be 60 dB that would be the spec here?

A: Right.

Q: And I'm not sure where it was under the FCC requirements for 500 dB. It would be 60 dB?

A: Right.

Q: Now, if the actual isolation achieved were 57 or 58dB at 200 megahertz, what would the result be in terms of picture quality?

A: It means that in a higher percentage of cases that if it were higher isolation you would have visible picture interference.

That is, the human eye's sensitivity to picture interference is different if the signal [111] is locked together.

So the signal difference and if you had relatively equal signal levels, even at 60 dB you would be right at the threshold of visibility.

Q: And when would you have relatively equal signal levels coming in?

A: Well, it's a statistical—you know, it's the odds of what are the signals coming in from the cable matching the signals in the antenna, and there's a range.

But like I say, if they happen to be exactly equal, then 60 dB—actually even 60 dB is excessive because the usual frequency is down around 55.

threshold even under the worst case of a difference in

And if they are either frequency locked or phase locked or slightly different in frequency, the threshold sensitivity you can tolerate at a much higher level without it being subjectively a problem.

Q: And in what circumstances would they have relatively equal signal strength coming in?

A: Under what circumstances? It's just a statistical function of the antenna signal coming [112] in off the cable versus the signal coming in off the antenna.

Q: For example, woukld that change depending on how far away the transmitting off-air antenna was?

A: How far away the transmitting antenna is, what its gain is, what the down lead is.

Q: On page 6 of the attachment in the last paragraph it's indicated that the Startron model which we were just discussing should be buff listed in the APC.

Do you know what that means?

A: I haven't the slightest idea.

Q: Do you know what the APC is?

A: No.

Q: Now, if you would turn to attachment 6.

A: That's after all these drafts?

MR. ISSENBERG: Yes.

MR. LOCKWOOD: That's at the very end. It's after all the tables. It's after that.

THE WITNESS: After the data sheets?

MR. LOCKWOOD: Yes.

THE WITNESS: All right.

[113] BY MR. ISSENBERG:

Q: Would you review that document, please, or that portion of this document.

(Pause in the proceedings.)

A: Okay.

Q: The pages aren't numbered, but on the third page of text which starts, "For example" at the very top.

A: Okay.

Q: Near the bottom there's some text saying, "The following switches were rejected based on isolation less than 60 dB up to 450 megahertz."

At 450 magahertz, 60 dB would be the isolation reqiured under the FCC rules; is that right?

A: At 450 I think that's correct, yes.

Q: And the results shown for the two switches listed there would not meet those requirements?

A: That's correct. These tests of course were built before there was any certification requirement from the Commission and people could say whatever they wanted to because [114] they weren't under any federal mandate to produce any quality of switch.

Many, you know—many of these manufacturers are gone. They're not in the business anymore. There were —there have been charlatans in this business like there have been in every other electronics business.

Q: So the manufacturers might have specified a certain isolation and knowing full well that the switches didn't achieve that?

A: Sure. And under no federal requirement to do any verification test because at that time there were no specs governing antenna selector switches.

We did some research that's in my report and we went to, you know, a very large cable system that uses a lot of switches, in the tens of thousands, and that is a—that's a worst-case environment for switches in that there are I think 36 channels on each side.

So at every channel position there's a signal on both sides of the switch and it's used to select between two cables in a dual cable system so it's switched frequently. It's in a lot of use. [115] And their failure rate data, which is a combination of reduced isolation and wear-out, was less than 1 percent a year.

Q: With the dual cable system situation, would the same level of isolation be required as is required between an A/B switch that was switching between an off-air antenna and a cable signal?

A: In the worst case you do not have as much requirement, but under Part 76 of the rules you're allowed —each cable is allowed to have variations of in a 330 megahertz system something in the order of 12 dB and you're allowed to have variations of 8 dB with temperature.

So it's quite possible to get 10 dB of difference between the signals on each side.

So yes, in an off-air situation you could have more.

Q: What could you get in an off-air situation?

A: Oh, it would not be unusual—well, I won't say it won't be unusual. It would not be surprising to find differences as high as, let's say, 20 or so.

Q: In the NCTA report at page 6, rather [116] than me reading it aloud, why don't you review the carryover paragraph that begins, "A typical low-cost switch."

(Pause in the proceedings.)

A: Okay.

Q: If I understand what you were just speaking about in terms of the difference in signal levels—and I may well not—would this—they're talking about a 40—

A: Dbmv.

Q: —dbmv T signal off air and a 5 dbmv cable signal. Would that be a 35 dB difference as you described, similar to what you described earlier?

A: That would be a 35 dB difference. On the other hand, the number of subscribers that have plus 40 dbmv on their antennas leases is a very small number.

As I say, this is a statistical issue and that is statistically a very small number of subscribers. It's very unusual to have probably about a higher than a plus 20, if you're talking about, you know, a meaningful number of [117] subscribers.

Q: With regard to dual system operators, do you know what isolation specifications are used in the selector switches that they use to switch between the two cable systems?

A: The system that I talked to, which is the San Jose system, buys switches which are to my understanding identical to the ones that are now sold in the stores as antenna selector switches. They have specs of 80 or 90 dB isolation.

Q: Would switches with specs for lower isolation last longer than switches with higher isolation?

A: Not necessarily. That depends on the design of the switch. It's a mechanical question more than an electrical system.

There are certain switch designs which could degrade with time, but generally speaking, those aren't in the market anymore for that reason.

When cable systems found that they were buying switches that wore out, they said we're not going to buy those anymore.

This is what I meant about, you know, [118] the bad vendors have, generally speaking, left the market.

Q: Does the isolation that will be achieved in practice differ depending on the various elements of a consumer's system?

A: Could you be a little more specific?

Q: Sure. For example, if the subscriber had a television that did not have a coaxial input and, so there was a transformer with twin-wire flat leads, and had an antenna that didn't have a coaxial cable, so there was another transformer there leading into the A/B switch, would the isolation that would be achieved in practice be less than of it were strictly a coaxial set-up?

A: We were concerned about that issue back in '87, actually ran some tests on it to prove that under, you know, ideal or, if you will, anti-ideal conditions you could have coupling between them. The FCC rejected that and said it's highly unlikely.

They did instruct cable operators just to make sure that when they installed switches or when they advised customers to install switches that they keep track of those separately.

[119] And over all of the years since we track very closely causes of leakage and causes of trouble calls and that has never been even statistically on the map as a cause of either leakage or coupling between antennas and cable sets.

Q: When you said earlier that you—I don't remember the exact term you used, but you tracked this problem or studied this problem.

Is that what's referred to or what's discussed in Exhibit 2, which is your paper?

A: Where in the paper are we talking about?

Q: Well, for example, on page 573 under Situational Testing.

A: No. What we did in 573 is we went into the lab and we set up various configurations of leads and inputs to sets and so on and we very carefully, you know, put them adjacent and moved them apart and so on. We were measuring under a lab condition what could happen.

What I was referring to is that there are two types of statistics that are typically kept pretty well by cable operaors. One is that signal [120] leakage has to be monitored, basically the entire system, every quarter. Every leak has to be logged, what its magnitude is, when it was found, when it was repaired and what its cause was.

So we have data on the causes of leaks.

Similarly, any cable operator—almost every cable operator—I won't say everyone does—but cable operators in general track the causes of trouble calls. You know, that comes out of the MIS systems and we simply look at those because we're always trying to find out where statistically the bulk of our trouble calls are coming from.

And again, you know, A/B switches, A/B switch installations, A/B switch leakage, leakage between antennas and receivers has never been statistically significant in either of those. We certainly monitored very closely on our systems both when I was at Gill and when I was at InterMedia.

Q: So let me try and characterize your opinion in this matter, and if I'm wrong, please correct me.

[121] In the process leading up to this report you were concerned that there could be signal leakage problems from the combination of these various components?

A: That's correct.

MR. LOCKWOOD: For the record, this report is the '87.

MR. ISSENBERG: I'm talking about the '87.

MR. LOCKWOOD: Exhibit 2.

MR. ISSENBERG: Exhibit 2.

THE WITNESS: Right

MR. ISSENBERG: I'm sorry. I lost my train of thought. Could you go back and let me know where I left off.

(The record was read as requested.)

BY MR. ISSENBERG:

Q: And so you studied the matter and at the time reported what you thought might be the results but subsequently have found that the problems did not come to pass as you thought they might?

A: Yeah. What we proved is there could be—theoretically there could be a problem if you [122] had this particular combination of elements. And we have subsequently—the FCC rejected it and we have subsequently found that it's not the problem.

And since that time there have been very few sets built with 300 ohm VHF antenna inputs, so that even if there were some problem, it's been a declining problem over the years. But it's never been a statistically significant problem even from that time.

Q: Does the signal isolation given by A/B switches deteriorate as time passes?

A: Okay. I think you asked that before. Depending upon the design of the switch, there may be designs that have some deterioration over time. I have not studied that much the internal design of switches.

Certainly electronic switches there's no reason to believe they would decline over time. There may be mechanical designs that do.

Again, if I go back to, however, the results that I got from Gill and they have used more than one manufacturer of switch over time, they're finding, you know, their aggregate yearly failure rate of 1 percent would include not only [123] switches which failed but switches whose isolation dropped down to where subscribers called in and said, I've got a problem.

So that sort of indicates that if there are reductions, they haven't been reductions that have caused problems.

I'll also say that to the extent that subscribers use converters, some slight reduction in isolation doesn't cause a problem anyway because the signals coming in off the antenna are on a different channel than the signal coming in from the converter.

So that couldn't be a problem anyway. A switch could degrade pretty badly without causing a problem.

Q: With regard to the 1 percent replacement per year, first off, that comes from your research with the San Jose cable system; is that right?

A: That's correct.

Q: Did you verify that by checking with any other cable systems?

A: No. The San Jose system is, if not the largest, one of the largest dual cable systems [124] in the world and I knew that they kept very good data on that kind of failure, so I felt that there's no reason to believe that they're not representational of other systems because the same—everybody buys the same manufacturer's switches.

Q: Is this the system that you worked in previously when you were at Gill Industries?

A: Yes. Right.

Q: Did you examine the records yourself?

A: I went through—I worked with the secretary of the engineering department and had her pull directly out of their reports the monthly failure rate for a year.

Q: Now, the 1 percent—

A: It was actually .82 percent or something, whatever it was. It was slightly less than 1 percent.

Q: Okay. That figure was based on complaints that were received; is that right?

A: This figure was based upon trouble calls where the —when they do a trouble call, there's a reason for the trouble call, the trouble call and then there's the resolution of the trouble [125] call.

What I had her pull was the resolution of the call, which means that when the technician finished the trouble call he said I replaced the A/B switch or there was something wrong with the A/B switch or whatever.

So I took all of the resolution codes which were related to the A/B switch and—

MR. LOCKWOOD: No. But he's asking you whether or not the impetus for the change was a complaint from a subscriber as opposed to some other.

THE WITNESS: Oh, Yeah. These were all—these were trouble calls, which means somebody called us and said, I've got trouble.

BY MR. ISSENBERG:

Q: So the system didn't do any type of routine or random checking in the field as to whether the A/B switches were obtaining the specified level of isolation?

A: Not directly, although as with every cable system there is quarterly monitoring of leakage. And any switch which has degraded significantly would result in a leakage because of [126] coupling across the switch. And the cable system would be rating from the antenna.

Q: How is this monitoring conducted? Is it conducted on a random basis?

A: The FCC allows either a dedicated drive-out or a random monitoring for the quarterly test. I believe they required for the yearly test that a full drive-out be done.

Q: What do you mean by "a dedicated drive-out"?

A: Okay. On what they call statistically monitoring, what you do—what most cable systems do is they equip all of their maintenance trucks with leakage detectors and in the course of driving around the system in the course of doing trouble calls or maintenance or whatever they can't help—I mean, the receiver tells them every time there's a leak.

A dedicated drive-out is done by equipping a technician with a receive, with an antenna, giving him a map of the system and saying drive every foot of it, you know, show it out as you do it and record all the leaks. And we put that into the calculation and we come up with our [127] yearly report.

There's a third way of doing it, which is to fly over the system in an airplane and actually measure it in the air.

Q: Your review of the system records regarding switch failure would not encompass those problems which were discovered during one of these drive-outs or during the statistical monitoring, would it?

A: Unless the Gill system has changed the way they handle the resolution of leaks, it would include it.

Because the way they historically have done it—I have no reason to believe they've changed—if a leak was found in the drive-out, it was entered as if it was a trouble call so that when the technician went out to fix that it would be logged as a trouble call even though the subscriber hadn't called in.

So yes, I can't swear that they have not changed their way of doing it, but that's the way they certainly did it at the time I was there.

Those numbers are consistent in a general way with my experience at InterMedia [128] Partners. We very carefully looked at the statistics on both trouble calls and signal leakage resolutions. And again, we found that switch —any kind of switch failures or degradations were an insignificant cause of leakage.

Q: If I understand this correctly, stating that 1 percent of switches or less would fail each year means that the average switch would last 100 years.

A: No. That's a common misconception on failure rate. They haven't been operating for a hundred years.

Q: Obviously.

MR. LOCKWOOD: He thought he had you.

MR ISSENBERG: No. I—

THE WITNESS: A 1 percent yearly failure rate can be otherwise stated that if I have a hundred switches, one of them will fail each year. That's failure rate within the lifetime of the device.

Now, the device presumably has some lifetime. What that data shows is that we've been heavily into this for 20 years now, roughly, and that they haven't reached lifetime yet. Because at [129] some point when they being statistically to reach their lifetime that failure rate will increase and the system will have to decide whether do I just keep replacing them on a random basis or I do something about it.

But no, I don't think anybody expects they're going to last a hundred years.

BY MR. ISSENBERG:

Q: In the NCTA report at page 13, information received from several cable operators using dual cable systems is referenced.

A: Uh-huh.

Q: And it states that the operators report A/B switch failure rates are between 22 percent and 36 percent per year.

Can you explain why there would be such a dramatic difference between that rate and the 1 percent rate in San Jose?

A: There were several switch manufacturers back in the '70's and early '80s who were producing some kind of junk, RCA for one, who basically got driven out of the business. They produced bad stuff and when good stuff became available, people stopped buying the bad stuff.

[130] So yes, there were, in the early days there were some real problems.

Gill went through a similar experience. We had had some bad exerience in the early days and we threw the bums out.

Q: In the carryover paragraph the report states, "An A/B switch cannot be expected to retain its switching capability for more than approximately three to five years."

Do you disagree with that statement?

A: Absolutely. I think that may have been true of statistically the switches that they looked at in 1985. I do not think that's true today.

Q: On page 12 the NCTA report states, "In better switches efforts are made to resist corrosion by goldplating

the contacts and/or coating them with an oxidation-reducing lubricant."

Are those still techniques used to resist corrosion?

A: I haven't examined the construction of the switches.

Q: Do you know whether the statement in [131] the next sentence that the goldplating and/or lubricant wears off with the first few uses of the switch is accurate?

A. I don't know whether that's true. I know statistically what the failure rate of the switch is, but as I say, I haven't made a study of the internal construction of the switches.

Q: Also on page 12 in the carryover sentence it states, "A switch that is mounted securely on a subscriber's television set probably will last longer than a switch left hanging by its connecting wires."

Would you agree with that statement?

A: No.

Q: Why not?

A: I don't know why it would. I mean, the same forces are on the switch. I suppose if it were a poorly made switch which didn't have adequate support for its antenna or its connections it might.

He may have had reference to some specific switch that they had then that had a problem. That's the only thing I can think that would be relevant to that.

[132] Q: But you don't know?

A: I don't know.

Q: Do you know who wrote this report?

A: It was a subgroup in the engineering committee. I just wasn't in that group, so I'm not sure who the authors were.

Q: Do you know if it was an ad hoc committee or it was a standing committee?

A: Well, certaintly it was an ad hoc committee because I at that time was chairing the only standing committee that would have been dealing with this.

Q: At that time was your committee consulted about this project or invited to undertake this project?

A: I would guess that members of my committee were involved in this project. As the chief engineer of a cable system, I simply had conflicts. I had things to do back at the office.

The trouble with all volunteer committees is you get who you get when you get them.

Since were were independently filing on this matter and I was very involved in that [133] independent filing, you know, they chose to do it without me.

Q: On page 18 of the report near the top of the page, the report states, "For example, some isolation loss is virtually inevitable due to corrosion of the terminating resistors."

First, what are terminating resistors?

A: Depending upon the switch design, when the switch is in a position that, let's say, input A is hooked to the television set, some switch designs also, rather than leaving input B just open, they connect it to what's called a terminating resistor.

It's simply a thing so that signals that come in B are, rather than being reflected back out of B, turned into heat in a resistor.

Q: Would you agree with this statement?

A: As a general statement, no.

Q: Why not?

A: Well, because I don't think it's at all inevitable that the terminating resistor corrodes or that if it does corrode in some way that that necessarily affects the isolation loss.

Q: Do you agree with the statement in the [134] next sentence that isolation can be further eroded by poor connections between the A/B switch and the coaxial cable linking the switch to the television set?

A: If there's a loss connection there and, say, a matching loose connection on the lead that goes to the antenna, you could have a reduction in isolation, yes. That is, with two leaky connections there can be some coupling between them.

Q: Would you turn to page 14 of your report, please. I'm sorry to keep jumping back and forth between them; it makes it hard to follow things.

At the bottom of section B you state, "I am aware of no widespread problem of signal leakage caused by improperly installed A/B switches."

Q: Have you done any research on this problem?

A: Absolutely.

Q: Have you done any research in the last five years on this problem?

[135] A: Absolutely.

Q: And what has your research discovered?

A: Okay. In the regular monitoring of all of Inter-Media's systems we very carefully look at the causes of leakage. And yearly we get together—well, every month every system sends me reports. Every quarter I get a full signal leakage report.

Every year we got together for a technical conference and we examined—you know, we traded information. We traded, you know, information on trouble calls, on signal leakeg calls, and so on, because we were continually trying to optimize where we were.

And in none of the analysis of either trouble calls or signal leakage results has the signal leakage causes related to A/B switches ever been significant.

As I say, it's so far off the scale, it was not even something that we gave a lot of attention. It was sort of statistically meaningless.

Q: Under subsection C regarding receiver [136] design, as I understand it, the problem that was the cause for concern was radiation of signals from an unshielded twin lead within the receivers?

A: That's correct.

Q: What I don't understand is why, as you state in factor C, a call to the cable company to rectify the problem would solve that problem since it's inherent in the TV receiver.

A: Oh, it's not inherent in the receiver. The potential is inherent in the receiver.

That is, inside the receiver is this twin lead and if you also have a twin lead coming down from the antenna and somehow that gets routed right up next to the back of the set on its way to the switch, you could theoretically have some coupling between what was in the receiver and—directly between the antenna lead and the lead in the receiver.

So that when if you didn't have a converter and you were switched to cable signals and the two cables were that close together, you could potentially have some coupling of the cable signals into the receiver through the back of the [137] receiver and into the antenna lead.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

Deposition of JONATHAN C. ABBOTT, held at the offices of Willkie, Farr & Gallagher, 1155 21st Street, N.W., Washington, D.C., commencing at 2:14 p.m., Thursday, May 18, 1995, before Doreen M. Dotzler, Notary Public.

* * * *

[4] Q: Could you state your name for the record, please.

A: I am Jonathan C. Abbott.

Q: And your present business title?

A: Is senior vice president of development and corporate relations.

Q: Of what entity?

A: PBS.

* * * *

Q: You have submitted an expert report in [5] this case, have you not, Mr. Abbott?

A: I have.

* * * *

[168] Q: Isn't it possible that increased federal funding could offset all the economic [169] effects of non-carriage for public television stations?

MS. CORWIN: Object to the form.

THE WITNESS: I really don't think that is possible given our current climate where we have had our federal funding reduced for the next two years. I don't know that is feasible.

BY MR. HUFFMAN:

Q: Is it possible if the government had a mind to do so that it could do that? Isn't it possible that if the government had a mind to do so, that it could by providing increased funding to public television stations offset all the economic effects of non-carriage of public television stations?

MS. CORWIN: Object to the form.

THE WITNESS: I'm not really sure because the challenge also is to estimate economic effects, and you would have to estimate what you were trying to make up, and so the government would have to know that kind of number.

BY MR. HUFFMAN:

Q: And if the government chose to overestimate to be safe, it could do that, couldn't [170] it?

MS. CORWIN: Object to the form.

THE WITNESS: It is not my experience that the government is ever putting its money in in lieu of somebody who has pulled their money out. Usually it is more for additional services, additional reach, not because it is offsetting funding.

BY MR. HUFFMAN:

Q: I'm just asking if it is possible?

A: The guardian angel scenario?

Q: Exactly.

A: You are asking me is it possible that there would be a cumulative gift to public television on an annual basis that would make up for harm, it's a hypothetical.

Q: Exactly.

A: And it is also a hypothetical—frankly, you are raising a hypothetical that given current climate the odds are very, very—are better than dim or worse than dim, I would say that it's possible that there are monies that I guess—I guess that's possible.

* * * *

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

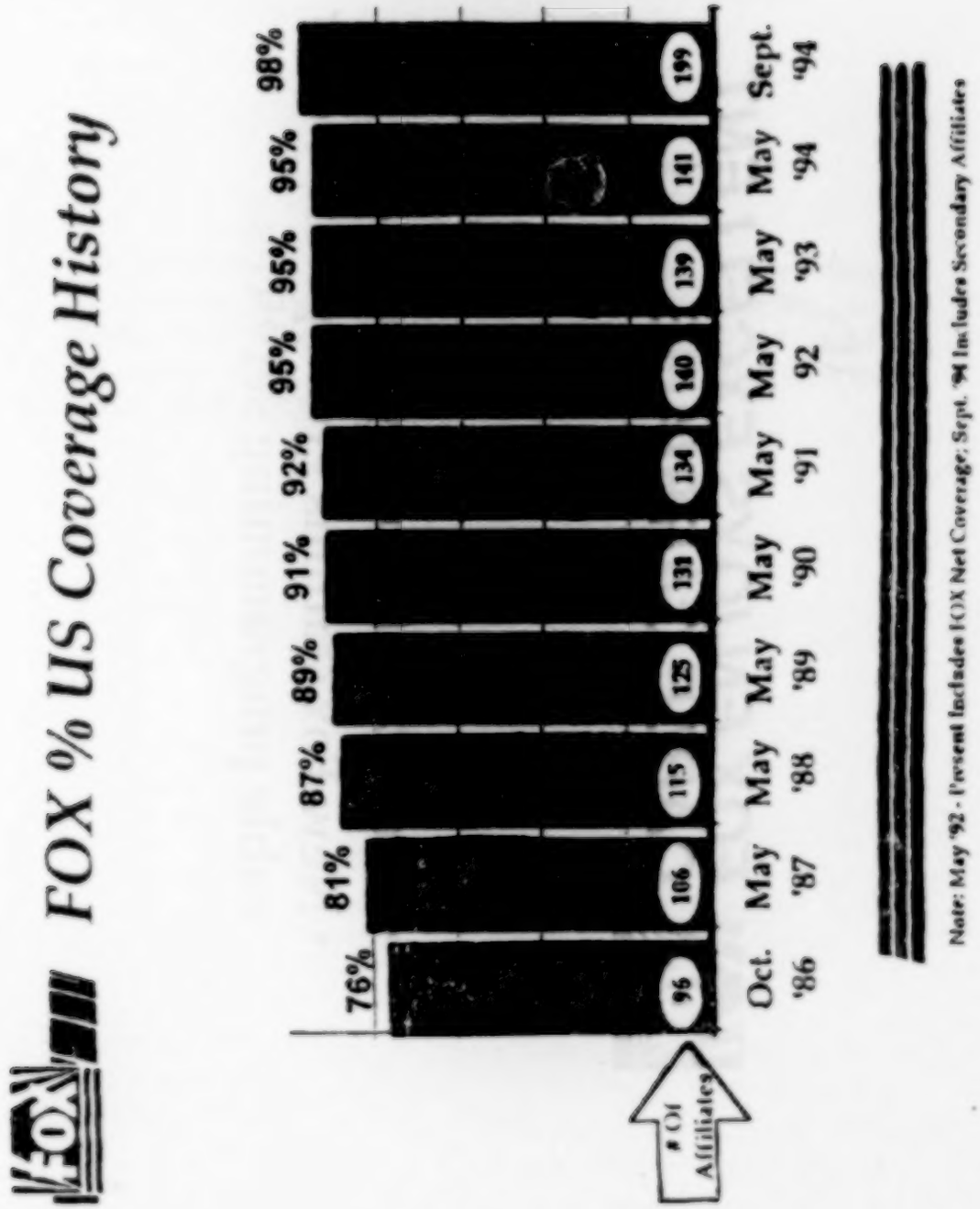
[Caption Omitted]

Deposition of LUCIE SALHANY, held at the offices of Cravath, Swaine & Moore, 825 Eighth Avenue, New York, New York 10019, commencing at 8:05 A.M., Thursday, May 18, 1995, before JULI D. MORRISON, RMR, RPR, CSR.

* * * *

[EXHIBIT 18]

[EXHIBIT 30]



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FOR THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

DEFENDANTS' REBUTTAL DECLARATIONS AND EXHIBITS

VOLUME VIII

* * * *

Dated: June 16, 1995

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[Exhibit H]

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

[Caption Omitted]

TELEPHONE CONFERENCE

ON DISCOVERY ISSUES

Thursday, May 18, 1995

The conference in the above-entitled matter was convened at 3:40 p.m.

Presiding: HON. JAMES R. MILLER, JR.
Special Master
Miller, Miller and Canby
200B Monrole Street
Rockville, Maryland 20850
302-762-5212

* * * *

[19] MR. PEARSON: I understand, Your Honor. And there is substantal evidence in the record that many people in the broadcasting industry took the position that Neilson methodology raised—had some very serious problems. And they are asking us to waive our ability to present additional evidence on that point. And what I am indicating is that we were only prepared to forego the right to present such evidence if they foregoed the right to argue to the court or ask the court to make a determination that this methodology is accurate. In other words, that's been our position all along. We will only limit our evidence if they do not ask the court to make a determination about the reasonableness, accuracy, effectiveness of Neilson methodology.

If they tell us right now that they are not asking the court to make any finding about that, then we don't need to present additional evidence. My concern is that they are asking the court to make such a finding at least implicitly.

JUDGE MILLER: Well, Mr. Gold.

MR. GOLD: Your Honor, I think Your [20] Honor is quite correct. The stipulation says what it says. We are presenting evidence that does contain Neilson data. The only thing I can think that Mr. Kit is trying to raise is—and there was places, I think, in one of his earlier letters where he seemed to intimate it—that he wants us to somehow agree that we are not going to introduce Neilson data for the court to consider. And we are not certainly not—we are not making any standards as to whether or not the court has to determine whether the methodology for Neilson is accurate or not. The fact is—

JUDGE MILLER: You are not making any such claim?

MR. GOLD: We are not asking—

JUDGE MILLER: You are not making any claim in which you request the court to determine the accuracy—whether the Neilson data is accurate or not accurate?

MR. GOLD: Correct.

MR. PEARSON: Well, if that's their position, Your Honor, then we will not need to produce additional evidence to rebut that.

JUDGE MILLER: All right.

MR. PEARSON: Although, I certainly [21] would intend to fully apprise the court of what is in the congressional record.

MR. GOLD: But then I believe the court will weigh on its own how much weight it decides to give to any data that's in the record—this is Mr. Gold—from the Neilson bucks.

JUDGE MILLER: I think that that's probably so. The court wkill decide what it believes to be relevant and what it believes to be necessary for it to carry out its determinations. And, you know, I am not going to tell the court, and I couldn't tell the court even if I wanted to, what those issues are that they are going to decide.

MR. PEARSON: Your Honor, I understand that. As long as the plaintiffs are agreeing—and I take what they said to be agreement—that they are not asking the court to make such a determination about the accuracy of Neilson methodology, then I don't see why we would need to present additional evidence rebutting that.

MR. KIM: This is Peter Kim. I agree to what is in the stipulation. And I don't want to get in a position where three weeks down the road, Mr. Pearson says, well, we had this [22] conversation, and I asked plaintiffs if they agreed and they said they agreed that they wouldn't do X, Y, or Z. I will say the stipulation stands as written and we do not waive our—we intend to make whatever constitutional arguments we have made in the past. And when we file our papers, you will know what arguments we make. If you feel you need to respond in some way or another or if you think that anything there is in violation of some document that's been entered by the court, you can address that at that time.

JUDGE MILLER: As far as my role in this is concerned, I wish to state as follows and do sate as follows:

The stipulation has been entered into by the parties in the form in which it now rests and it has been approved by the court. The circumstances under which the stipulations were entered into are a matter of record for the most part, if not totally. The parties—as I understand it, there is not going to be an expressed request by the plaintiffs that the court determine the accuracy or inaccurcy of the Neilson methodology, but the court may feel obliged to do so on its own.

[23] The stipulation, in my judgment, does not preclude Mr. Pearson from producing materials which were in the congressional record which was the record on which the Congress acted. And I don't think the stipulation was intended or designed to preclude that. That's as far as I am prepared to go. And I believe ultimately if there is some dispute about what your respective rights are under this stipulation based on the papers that you produce on the motion for summary judgment, the court is going to have the resolve it. I can't.

MR. PEARSON: All right, Your Honor. This is Mr. Pearson. I suggest we move to the second issue.

JUDGE MILLER: All right.

MR. ENNIS: Your Honor, Bruce Ennis. I am leaving the conference at this point.

JUDGE MILLER: Okay, fine.

MR. ENNIS: Thank you, Your Honor.

JUDGE MILLER: Thank you.

* * * *